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THE SELEUCID MINT OF ANTIOCH

By EDWARD T. NEWELL

It is surprising that, while much has been written concerning the large and important coinage of the Seleucid sovereigns of Asia, we should still be at such a loss to assign the greater part of this coinage to the mints that were once so active in its production. To be sure, we can easily and correctly distinguish the issues of Sidon, Tyre, Berytos, and Ake Ptolemais — but only because, from the reign of Alexander Balas on, these coins bear such obvious mint marks that they can not be misread. Some of the later issues of Tarsos and Mallos in Cilicia are also distinguishable. But since the appearance of Dr. George Macdonald's two illuminating monographs[1] dealing with certain Seleucid coinages of Asia Minor, little advance[2] has been made and the origin of the bulk of the Seleucid coinage is still an enigma.

At first sight the vast material remaining seems to present almost insurmountable difficulties, but the inducements offered to students and historians to solve the problem are correspondingly many. The Seleucid coinage in particular is closely associated with, and therefore partakes of, the vicissitudes of the many rulers who issued it; its long and splendid line of living portraits — not only of the legitimate scions of the House of Seleucus but also of usurping regents and rebellious satraps such as Achaeus, Timarchus, Tryphon, and others — give it a vital and human interest that is not surpassed in Greek Numismatics. Its many mints and long existence give it a variety of types and of artistic style that is most attractive. While the time is certainly not yet ripe for a pretentious study of the Seleucid coinage as a whole (such as, for instance, has been done by Svoronos for the Ptolemaic series) much can be accomplished in sorting out the issues of various mints or in the intensive study of some one of these mints.

[1] Jour. Hell. Studies, Vol. XXIII, 1903, Vol. XXVII, 1907.

[2] Dr. Imhoof-Blumer has since published an article dealing with Seleucid coins in the Numismatische Zeitschrift for 1913, but while this is important for new material and its association with types already known, only suggestions are made concerning the actual mints. Rev. Edgar Rogers has also published some Seleucid coins in his collection (Num. Chron., 1912).

It is undoubtedly obvious that the most important and the longest lived of all the Seleucid mints was that of their capital Antioch. Curiously enough no systematic study has yet been made of this mint under the Syrian Kings. If the probably prolific issues of this great commercial and political centre, the heart as well as the head of the Seleucid Empire, could be picked out, gathered together, and studied, not only would a considerable advance be recorded in our knowledge of this particular field, but a long step would be taken towards solving the problems of the remaining mints. The following is an attempt in this direction.

Apologies, however, are necessary for the incompleteness of this work, due partly to the rush of other work but principally to the present war which has not only hastened the publication but, above all, has made it impossible to secure casts of certain important coins in the great public and private collections abroad. Reliance has therefore had to be placed solely upon the catalogues of the Seleucid coins in Paris, London, and Glasgow; the catalogue of the coins in the Hermitage Collection, Petrograd (Jour. Int. Num., Vol. XIII, 1911) ; various sales catalogues of the past twenty years ; catalogues of certain private collections ; and finally upon such actual specimens as are to be found in the scattered collections of America. While, therefore, the following list of coins attributable to the great mint of Antioch is far from complete[3], perhaps enough have been brought together to give us a more or less clear outline of the issues as a whole, to show their real sequence, and to throw in relief the comparative importance of this coinage and the light it sheds on the history of the times. It is also most unfortunate that we are forced to commence our studies of the Antiochene mint with a coin struck as late as the reign of Seleucus II. This was certainly not the first issue of our mint; its coinage undoubtedly goes back well into the reign of Antiochus I, if not earlier. But the coinages of the earlier sovereigns from Seleucus I to Seleucus II are notoriously obscure and complicated, and they can not be satisfactorily studied and elucidated without the assistance of hundreds of coins and casts. These, it is manifest, can not be secured at the present time. In this article we desire only to deal with coins which can be certainly attributed to Antioch, and as the issues of this mint emerge from chaos

[3] Only the gold and silver issues have been treated with any fullness as these are the ones most commonly illustrated in our catalogues. The bronze issues have only been indicated, as it would be impossible to treat of these successfully without seeing and handling the actual specimens. Furthermore, the bronze coins are seldom illustrated in our catalogues.

into a clear and orderly sequence only with the following coin this one must, perforce, form the introduction to our study.[4]

SELEUCUS II, 246-226 B. C.

1 TETRADRACHM.

Obv. Diademed head of Seleucus II to right. Circle of dots.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ΣΕΛΕΥΚΟΥ (to l.). Apollo, naked, standing to l., holds arrow in outstretched r., and leans with l. on tall tripod. On l., outside the inscription, Ξ. On r., outside the inscription, Ψ.

Newell, Plate I ; London, no. 5 ; Paris, no. 255.

2 TETRADRACHM.

Obv. Similar, and of similar style.

Rev. Similar to preceding. On l., outside inscription, Ξ. On r., outside inscription, Ϫ.

Paris no. 256.

The attribution of these tetradrachms to Antioch is dependant upon the similar ones struck by Seleucus III and Antiochus III of which we will treat later. We here see a custom followed which seems to have been more or less prevalent in Greek regal coinages, namely that the issues of the capital or principal mint of a kingdom bore only magistrates' symbols or monograms — but never any mark to designate the particular city at which the piece was struck.[5] Thus under the Ptolemies the issues of Alexandria bore only magistrates' marks, but the provincial mints of Cyprus and the Phoenician coast nearly always placed mint marks, in the full sense of this term, upon their coins. So it had been under Alexander the Great. The central mints of Pella, Amphipolis, Sardis, Halikarnassos, Tarsos, Babylon, and Alexandria used no distinctive marks to designate the issuing mint, while, on the other hand, subsidiary mints in Cyprus, Syria, Phoenicia and other localities often did employ real mint marks. The same thing is true of the later Macedonian and Pergamene royal issues. While this may seem a sweeping statement, close inspection will show that it is essentially correct. The few exceptions that from time to time occur only

[4] The historical notes accompanying this article are based throughout on Bevan, "The House of Seleucus," and Niese, "Die Geschichte der griechischen und makedonischen Staaten." Acknowledgment is here made the assistance afforded by these invaluable works.

[5] This custom is not confined to ancient times as, for instance, to-day in the United States only the subsidiary mints of New Orleans, Denver, and San Francisco mark their issues, the principal mint, Philadelphia, does not.

tend to prove the existence of such a custom as a whole. It is also not meant to imply that *all* minor mints were accustomed to mark their coinages. There are innumerable instances where they too used only magistrates' marks; but in general, especially in the Seleucid Empire, they managed by monogram, symbol, or peculiar type to distinguish the local series from the larger mass of the royal issues struck in the great centres of the empire. To reiterate then, in the Seleucid coinage we will find that the mint of Antioch never, until a late period, placed a distinguishing monogram or symbol on its issues, in strong contrast to the smaller, or perhaps more autonomous mints, such as Tyre and other Phoenician cities, which from the time of Antiochus III gradually adopted the custom of using special marks for their coins. This custom was also later followed by mints in Cilicia.

SELEUCUS III, 226-223 B. C.

In 226 B. C. Seleucus III succeeded to his father's dominions, which by now had shrunk to Cilicia, Syria, Mesopotamia, Babylonia, Persis, and Media. Without being able to increase these dominions he died suddenly (probably by poison) in the Summer of 223 B. C.

Such coins issued in his name and bearing his portrait as can be assigned to Antioch are the following:

3 TETRADRACHM.

Obv. Diademed head of Seleucus III, with slight indication of a side beard, to right. Circle of dots.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ΣΕΛΕΥΚΟΥ (to l.). Apollo, naked but for chlamis draped over right thigh, seated to l. on omphalos, holds arrow in outstretched r., rests l. on bow. On l., outside inscription, Ξ. On r., outside inscription, Ψ.

London no. 1 (Pl. vii, 6); J. Ward Coll. no. 781 (Pl. xix); Jameson Coll. no. 1682 (Pl. lxxxiv); Egger Sale xlv, 1913, no. 657 (Pl. xix); Roll. & Feuard. Sale, June, 1913, no. 330, **Plate I**; Egger Sale, Jan., 1908, no. 575 (Pl. xvii); Hirsch, Weber Sale, no. 4047 (Pl. lvii); Newell (two specimens, one ex. Zschiesche & Köder Sale; April, 1913, no. 690, Pl. ix); Paris, nos. 297 and 298; Coll. Walcher de Molthein, 1895, no. 2913 (Pl. xxv).

4 TETRADRACHM.

Obv. Diademed head of Seleucus III with beard very evident. Circle of dots.

Rev. Similar to preceding. On l., outside inscription, Ξ. On r., outside inscription, ⍓.

Paris, no. 296 (Pl. viii, 11); Egger Sale xli, no. 652, **Plate I.**

5 TETRADRACHM.

Obv. Similar to preceding.

Rev. Similar to preceding. On l., outside inscription, ☤.

Paris, no. 299; London (Num. Chron., Ser. IV, Vol. XIV, Pl. viii, 8).

6 TETRADRACHM.

Obv. Similar to preceding.

Rev. Similar to preceding. On l., outside inscription, ⨽. On r., outside inscription, ΣΩ.

London, no. 2.

That these types belong to the same mint as no. 1 of Seleucus II is evident from similarity in style, and above all by the recurrence of the two characteristic monograms ⨽ and ☤. The rule of Seleucus III was too short to bring about much change in the personel of the mint. The comparative commonness of the type represented by no. 3 (it is easily the most frequent of all the tetradrachms of Seleucus III) points to the principal mint of this ruler's empire as their place of origin.

ANTIOCHUS III, 223-187 B. C.

For a short time after the sudden death of Seleucus III the succession to the Seleucid throne was under debate.[6] The younger brother of the dead king, Antiochus by name, was at this time in distant Babylonia as governor. Fortunately for him, however, his cousin Achaeus assumed the direction of affairs in the West in his favor until the new king could himself reach the capital and take over the actual rule. As Achaeus had thus declared for Antiochus III from the beginning, and occupied the central portion of the Empire, there is no doubt that coins were struck at Antioch in the latter's name shortly after the reception of the news of the death of Seleucus III. In full accord with this assumption we find a large series of tetradrachms closely bound by style and monograms to those of the dead king and evidently struck in the same mint with little or no interval between their respective appearances.

[6] The well known coins with the portrait of a young boy and the inscription ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ have been assigned to this period by Droysen and Babelon and supposed by them to have been struck by an ephemeral and shadowy Antiochus mentioned in an inscription. This attribution has since been discarded — and with right as we shall see.

SERIES I, Circa 223–206 B. C.

YOUTHFUL PORTRAIT.

a. Beaded Border.

7 TETRADRACHM.

Obv. Youthful head of Antiochus III to r., diademed. Ends of diadem hang down. Circle of dots.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ΑΝΤΙΟΧΟΥ (to l.). Apollo, naked but for chlamis draped over right thigh, seated to left on omphalos, holds arrow in outstretched r., rests l. on bow. On l., outside inscription, 𐤌 and 𐤑.

Bunbury Sale, no. 466, **Plate I**; Glasgow, no. 3 (Pl. lxv, 7); Newell.

8 TETRADRACHM.

Obv. Similar head but side beard not visible and one end of diadem flying.

Rev. Similar to above. On l., outside inscription, 𐤑 and 𐤌.

Egger Sale xli, no. 659, **Plate I**; Sotheby Sale, July, 1899, no. 116 (Pl. iii).

9 TETRADRACHM.

Obv. Youthful, diademed head of Antiochus III to r. Ends of diadem hang down. Circle of dots.

Rev. Similar to preceding. On l., outside inscription, 𐤑. On r., outside inscription, 𐤅.

Egger Sale xli, no. 663, **Plate I**.

b. Fillet Border.

10 TETRADRACHM.

Obv. Youthful, diademed head of Antiochus III to r. Ends of diadem hang down. Fillet border.

Rev. Similar to preceding. On l., outside inscription, 𐤑 and 𐤌.

Jameson Coll. no. 1686, **Plate I**.

11 TETRADRACHM.

Obv. Similar to preceding. Fillet border.

Rev. Similar to preceding. On l., outside inscription, 𐤌 and 𐤑.

Helbing, Zschiesche & Köder Sale, April, 1913, no. 689 (pl. ix).

12 TETRADRACHM.[7]

Obv. Similar to preceding.

Rev. Similar to preceding. On l., outside inscription, 𐤑.

Egger Sale, xli, no. 660; Egger Sale, xli, no. 661; Egger Sale, 1908, no. 577, **Plate I**; Merzbacher Sale, 1910, no. 823 (Pl. 14); Num. Chron., 1883, Pl. v. 1; London, no. 25; Coll. L. Welcher de Molthein, 1895, no. 2920 (Pl. xxv); Amer.

[7] The gold Oktadrachm in the Hunterian Coll., Glasgow, no. 1, Plate lxv, 6, of this type, is now considered to be a forgery (cast).

Num. Soc.; Rome, Strozzi Sale, 1907, no. 1663 (Pl. xi); A. Cahn Cat. no. 24, no. 763 (Pl. iv).

13 TETRADRACHM.

Obv. More mature head, high relief. Border not visible. *Rev.* Similar to preceding. On l., outside inscription, ϟ.

Sardis (Publications of the Amer. Soc. for the excavation of Sardis), Vol. XI, Part I, 1910–14, no. 397 (Pl. i).

14 TETRADRACHM.

Obv. Similar to preceding but of lower relief. Beaded border. *Rev.* Similar to preceding. On l., outside inscription, ϟ.

American Numismatic Society, Plate I.

15 TETRADRACHM.

Obv. Similar to preceding. *Rev.* Similar to preceding. On l., outside inscription, ϟ and ϖ. On r., outside inscription, ϕ.

Newell, Plate I.

This compact series of tetradrachms is closely associated with those of Seleucus II and III by the constant recurrence of the two characteristic monograms ɪ and ϟ, and by the close similarity of their styles. With no. 10 appears for the first time in the Seleucid coinage the fillet border in place of the more usual beaded border. As Babelon, following Cavedoni, has shown,[8] the significance of the fillet on account of the close association between this particular form of fillet and the worship of Apollo is to be referred to the Apolline origin of the Seleucid family. On well preserved Seleucid coins we are able to distinguish the fillet decoration on the omphalos upon which Apollo is seated. It is needless to draw the reader's attention to the great honor in which the worship of Apollo was held at Antioch and to the famous temple and sacred grove of this divinity situated just outside the walls at Daphne. There may be some significance, therefore, in the fact that it is upon the issues which we would attribute to the Antiochene mint that the fillet border first appears.

The portrait of Antiochus III, as found on this series, suits the circumstances of the case very well as we know that he was about eighteen years of age when he was called to the throne. The portrait is evidently that of a young man in his early twenties.

[8] Babelon, Les rois de Syrie, etc., Introduction, pp. lxxvi, lxxvii.

Running parallel with these silver coins there is also a bronze series containing at least two denominations. The types for the large size are: obv. Head of Antiochus III, rev. Apollo seated; those for the small size are: similar obverse, rev. Apollo standing. The monogram ⌘ is found on all of these and, in addition, the letters Δ (Paris no. 400), I (Paris, 399, 410, and London 49-51), ⊙ (Paris 398), and without letters (Paris 397). It is not impossible that these letters may form a portion of a series of regnal dates or the indications of numbered issues.

SERIES II, Circa 206–200 B. C.

MIDDLE-AGED PORTRAIT.

a. Elephant type.

16 STATER.

Obv. Diademed head of Antiochus III to r. Ends of taenia hang down. Circle of dots.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ANTIOXOY (to l.) Elephant with raised trunk to r. In front, ⌘, in exergue, Α.

Paris, no. 393, **Plate I.**

17 TETRADRACHM.

Obv. Diademed head of Antiochus III to r. Ends of taenia hang down. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ (above) ANTIOXOY (below). Elephant to r. On l., Φ, on r., M.

Paris, no. 394, **Plate I.**

18 TETRADRACHM.[9]

Obv. Similar to preceding.

Rev. Similar to preceding. On l., Φ, on r., Π.

London, no. 28, **Plate I.**

b. Apollo type.

19 STATER.

Obv. Diademed head of Antiochus III to right. Ends of taenia hang down. Circle of dots.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ANTIOXOY (to l.). Apollo, naked but for chlamis draped over right thigh, seated to l. on omphalos, holds arrow in outstretched r., rests l. on bow. On l., outside inscription, Φ. On r., outside inscription, ΠΙ.

London, no. 3, **Plate II**; Hirsch Weber Sale, 1908, no. 4050 (Pl. lii).

[9] If the rather common drachms of the elephant type are to be taken as an Antiochene issue, as now seems likely, they would form, in style and type, a transition between the tetradrachm no. 13 of the preceding Series, and nos. 17 and 18 of the present Series. The monogram found on these drachms is not unlike that on the Elephant tetradrachms. Specimens of the drachm are to be seen in the following collections: London, nos. 30 (Pl. ii), 31, 32; Paris, nos. 395 (Pl. x, 3), 396; Jameson, no. 1689 (Pl. lxxxv); Newell (two specimens); Petrograd, nos. 268, 269; J. Ward Coll., no. 784 (illustrated); Glasgow (Hunterian Coll.), nos. 32 (Pl. lxv. 13), 33.

20 TETRADRACHM.

Obv. Head of Antiochus III as above except that ends of taenia are flying. Fillet border. *Rev.* Similar to preceding. On l., outside inscription, ϟ.

Newell, Plate II ; Paris, nos. 374 and 375 ; Bourgey, Rousset Sale, April, 1908, no. 198 (Pl. vii).

21 DRACHM.

Obv. Head as above. Circle of dots. *Rev.* Similar to preceding. On l., outside inscription, ϟ.

London, no. 16.

22 TETRADRACHM.

Obv. Similar to no. 20. Fillet border. *Rev.* Similar to no. 20. On l., outside inscription, Ψ.

Newell, Plate II ; Newell (another).

23 DRACHM.

Obv. Similar to no. 21. Border of dots. *Rev.* Similar to preceding. On l., outside inscription, Ψ.

London, no. 14, Plate II ; Paris, no. 392 (Pl. ix, 16).

24 TETRADRACHM.

Obv. Similar to no. 20. Fillet border. *Rev.* Similar to preceding. On l., outside inscription, TRIPOD (with base).

Newell, Plate II ; Paris, nos. 372 (Pl. ix, 11) and 385 (Pl. ix, 13) ; Bunbury Coll., no. 474 (Pl. iv) ; Sardis (Publications of the Amer. Soc. for the Excavation of Sardis), Vol. XI, Part I, 1910–14, no. 393 (Pl. i).

In the Numismatische Zeitschrift for 1913, pp. 187, 188, Dr. Imhoof-Blumer has assembled certain of the coins which we have just enumerated, namely nos. 1, 2, 3, 4, 5, 6, 7, 8, 11 and 16 and, on account of the characteristic monograms ⱡ and ϟ which these bear, has rightly enough discerned that the coins in question must be the product of a single mint, and suggests, furthermore, that this mint may have been Antioch. In this we can but agree with him as being the only possible solution because of the great number, not only of varieties but of actual specimens that have come down to us. In proceeding from the point at which Dr. Blumer left off and studying the succeeding series of coin issues which appear for every reign throughout the remainder of Seleucid history we will see that only Antioch could have been the source of such an unbroken sequence of coinages. When, however, Dr. Blumer

would see in the monograms ⌶ and ⍒ something else besides magistrate's marks because, as he states, the coins bearing these cover a period of fifty years or more, we find it impossible to follow him. His error lies in computing the years over which these two monograms must stretch by counting in the *full* reigns of both Seleucus II and Antiochus III, that is from 246 to 187 B. C.— a matter of some fifty-nine years. We have seen, however, that the two monograms in question only appear upon the coins of Seleucus II just before his death in 226 B. C. They then continue through the reign of Seleucus III (226-223), and through the first period (circa 223-206) of Antiochus III when his portrait is still that of a comparatively young man. At this point ⌶ drops out, but ⍒ appears again, but alone, during the next period which ends about 200 B. C. and whose coin issues show Antiochus III as a man of middle age — that is about thirty-five to forty years of age. In other words the two magistrates signing themselves ⌶ and ⍒ respectively were in office, the one not longer than from say 228 to about 206 B. C., the second from 228 to about 200 B. C. at the longest, an extended but never-the-less far from impossible tenure of office. Dr. Blumer appears to be mistaken in considering the features of Antiochus III on the later coins (our nos. 16 and 20) as those of an elderly man and therefore to be referred to the end of his reign. As can be seen on our plates the features of Antiochus on this Series (nos. 16 to 24) are still full and vigorous and without the trace of a single wrinkle. They would seem to be those of a man of strong personality and in the prime of life, perhaps some thirty-five to forty years of age, which fits in well with the dates assigned to these coins. A much older portrait will be found in the next series.

Looking closely at the coins which comprise Series II we see that it is but a continuation of Series I. We find a slightly older head, the same fillet border of the latest coins of the previous series, the characteristic monogram ⍒, and in ⏄ a slight variant of the monogram ⏃ seen on no. 15. The elephant stater, no. 16, certainly belongs to our mint on account of the monogram ⍒. It is therefore likely that the two tetradrachms nos. 17 and 18, with the same reverse type of an elephant, were struck here as well. In confirmation of this we should note the close similarity of style and workmanship between the obverses of these two remarkable pieces and the obverses of nos. 20, 22, and 24. The placing of the commencement of Series II in the year 206/205 B. C. is due to the sudden and ephemeral appearance of the elephant

for the reverse type. This animal would be the most natural emblem that could be selected to celebrate what Antiochus III was pleased to call his subjugation of Bactria and India. His achievements in the East undoubtedly made a great impression upon his contemporaries by whom he was henceforth called the "Great." There were no doubt great celebrations held at Antioch when news arrived of his successes, the acknowledgment of his suzerainty by Euthedemus and Sophagasenus, and the statement that the Bactrian king (and perhaps the Indian as well, though our historians do not say so) had turned over to the Seleucid army a large force of Indian elephants. These remained the pride and strength of the Seleucid armies until, in later years, when disasters had befallen the Empire, Rome saw fit to send a commission to Syria with the express purpose of destroying or rendering useless all elephants collected at Apamea the Seleucid arsenal.

With no. 24 monograms disappear for a time from the coinages of our mint, their place being taken, by symbols. The style and appearance of this piece is too similar to the preceding numbers to separate it from them.

The custom, first brought out in this series, of using the fillet border only for the tetradrachms, is to be noted; the smaller sized denominations, such as the stater and drachm, still use the beaded border.

SERIES III, Circa 200–187 B. C.

OLDER PORTRAIT.

25 GOLD OKTADRACHM.

Obv. Diademed head of Antiochus III to r. Ends of taenia flying. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ΑΝΤΙΟΧΟΥ (to l.). Apollo, naked but for chlamis draped over right thigh, seated to left on omphalos, holds arrow in outstretched r., rests l. on bow. On l., outside inscription, ROSE.

London, no. 1, Plate II.

26 TETRADRACHM.[10]

Obv. Similar.

Rev. Similar. On l., outside inscription, BOW IN CASE.

London, no. 27, Plate II; Paris, nos. 378, 380, and 381; Glasgow (Hunterian Coll.), nos. 10 and 11; Egger Sale, Jan., 1908, no. 580 (Pl. xvii).

[10] To this issue may belong Paris no. 373, with symbol: CORNUCOPIAE. As I have not seen the piece it has not been included. No. 582 in Egger Sale of Jan. 7, 1908, Plate xviii, with doubtful symbol in field, probably also belongs here.

27 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, BOW IN CASE. In exergue, AΣK.

Glasgow (Hunterian Coll.), no. 12, Plate II; Paris, no. 379.

28 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, BOW IN CASE. In exergue, ACK.

Newell, Plate II.

29 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, HORSE'S HEAD.

Newell, Plate II.

30 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, ANCHOR.

Newell (formerly Hirsch, Weber Sale, no. 4056), Plate II; Glasgow (Hunterian Coll.), no. 14 (Pl. lxv, 10); Egger Sale xlv, no. 753 (Pl. xxi).

The coins of Series III, as a glance at our plates will show, are but a continuation of the later coins of Series II. The only differences to be noted are the ageing of the king's features, and the general adoption of a symbol in the place of a monogram to designate the officiating mint magistrate. On nos. 27 and 28 an additional magistrate places his initial letters in the exergue. These letters AΣK have, not surprisingly, been thought by numismatists to indicate a mint at Ascalon in Palestine. But if we attribute these two pieces to Ascalon we will have to also assign all the coins nos. 19-30 to this mint as well, which is manifestly absurd. The indication of mints by letters or symbols on Seleucid silver issues did not become general until the time of Alexander Balas, although from the end of the reign of Antiochus III the Tyrian mint is indicated by a club. So far as I know this is the only mint throughout the reigns of Antiochus III, Seleucus IV, Antiochus IV and V, and Demetrius I that placed any direct allusion to locality on its silver coinages. We can not separate nos. 27 and 28 from the remainder of this Series as they are all too closely bound together by style and appearance.

The features of Antiochus on these coins show, as stated above, a distinct advance in age over those of the previous Series.

The most interesting of these coins is the gold oktadrachm no. 25. Although it is unlikely, as has been suggested, that this large coin (a very rare denomination in the Seleucid series and only struck under Antiochus III) has anything to do with the famous despoiling of the temple of Anaïtis at Ecbatana at the commencement of the great Eastern expedition, we may perhaps attribute its appearance to the mighty preparations for the war against Rome. Or, with more likelihood, we may see in it an attempt to meet the demand for such pieces in the Phoenician cities after their removal from the Egyptian domination. Under the second and third Ptolemies, and at times under the later ones, many gold oktadrachms (of Phoenician weight) were struck in the mints of Sidon, Tyre, Ake-Ptolemais, Gaza, and Joppa. When these mints failed to strike any specimens of this particular denomination the mints of Cyprus and of Alexandria seem to have continued to do so. The inhabitants of these Phoenician cities would have grown accustomed to the use of a large denomination in gold and it might therefore have been in an attempt to conform with this usage that certain Seleucid mints proceeded to strike what was to them an unaccustomed piece. The apparent age of the features on our particular specimen would point to about the commencement of the second century B. C. as the date of striking. As by 197 B. C. the Phoenician coast was firmly in the possession of Antiochus this possibility is at least worth considering.

SELEUCUS IV, 188/7-176/5 B. C.

After the storm and stress of the glorious as well as disastrous reign of Antiochus III, surnamed the Great, the years of Seleucus IV, his son, passed in comparative peace and quiet. It is a period given up to the rebuilding of the Seleucid power, a power shaken and strained in every fibre of its being by the wars and turmoil, the victories and defeats of the past thirty years. This may have been a time of peace as it was not of prosperity — the losses of the colossal and far-flung wars of Antiochus were too great, the country groaned beneath the tribute which successful Rome had demanded of the defeated Empire. According to Polybius twelve thousand talents was the yearly stipend to be paid for the duration of twelve years. Theoretically this great assessment would have been completed by 178 B. C., but the bankrupt kingdom was unequal to the task and so we find that in the reign of

Antiochus IV the unsettled portions of the indemnity were still being paid.

31 TETRADRACHM.

Obv. Diademed head of Seleucus IV to r. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ΣΕΛΕΥΚΟΥ (to l.). Apollo, naked but for chlamis draped over right thigh, seated to l. on omphalos, holds arrow in extended r., rests l. on bow. On l., outside inscription, STAR.

Glasgow (Hunterian Coll.), no. 1, Plate II.

32 TETRADRACHM.

Obv. Similar, but border of dots.

Rev. Similar. On l., outside inscription, FILLETED PALM BRANCH.

Glasgow (Hunterian Coll.), no. 10 (Pl. lxvi, 4).

33 TETRADRACHM.

Obv. Similar, but filleted border.

Rev. Similar. On l., outside inscription, WREATH-BEARING NIKE.

Glasgow (Hunterian Coll.), no. 2; Paris, no. 472.

34 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l. outside inscription, FILLETED PALM BRANCH.

Glasgow (Hunterian Coll.), no. 4; Paris, no. 469.

35 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, FILLETED PALM BRANCH. In exergue, Δ.

Newell, Plate II; Paris, nos. 464, 465; Petrograd, no. 307 and (?) 308; Sotheby, Guzman Sale, 1914, no. 112 (Pl. vi); Rome, Strozzi Sale, 1907, no. 1666 (Pl. xi).

36 DRACHM.

Obv. Similar, but with a circle of dots.

Rev. Similar. On l., outside inscription, PALM BRANCH. In exergue, Δ.

Paris, no. 467.

37 TETRADRACHM.

Obv. Similar to no. 35.

Rev. Similar. On l., outside inscription, FILLETED PALM BRANCH. In exergue, M.

London, no. 9; Paris, no. 470; Amer. Num. Society, Plate III; Petrograd, nos. 311 and 312.

38 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, FILLETED PALM BRANCH. In exergue, Φ.

Paris, no. 468; Egger Sale, Jan. 7, 1908, no. 586, **Plate III**; London, no. 11.

39 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, PALM BRANCH and WREATH. In exergue, ⚓.

London, nos. 12 and 13, **Plate III**; Paris, nos. 462 and 463; Hirsch, Rhousopoulos Sale, no. 4450 (Pl. lv); J. Ward Coll., no. 785 (Pl. xix); Egger Sale, xli. 1912, no. 671 (Pl. xix); Newell; Amer. Num. Soc.; Petrograd, nos. 305 and 306; Egger Sale, Jan. 7, 1908, no. 587 (Pl. xviii); Coll. L. Waleher de Molthein, 1895, no. 2928 (Pl. xxv); Sotheby, Cumberland Clark Sale, 1914, no. 264 (Pl. vii); Hirsch, xxxiii, 1913, no. 894 (Pl. xxi); Egger Sale, xlvi, 1914, no. 2443 (Pl. xxxix).

40 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, FILLETED PALM BRANCH and APLUSTRE. In exergue, ⚓.

London, no. 8; Paris, no. 466; Glasgow (Hunterian Coll.), no. 8, **Plate III**; Petrograd, no. 309.

41 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, PALM BRANCH. In exergue, ⊢Γ.

Glasgow (Hunterian Coll.), no. 6.

The coinage of Antioch under Seleucus IV follows closely the model set by the last issues of Antiochus III. We see the magistrate's symbol in the field on the left outside the inscription; the fillet border on the obverse[11] for the tetradrachms; the circle of dots for the drachm; the same high relief for the head; the comparatively low relief for the reverse. With no. 35 and following, a magistrate's monogram is found in the exergue, while the symbol still continues in the field.

In contrast to the coinages of Antiochus III the issues of Seleucus, as a whole, seem to be divided between only three or four mints at most. The coins which we here attribute to Antioch easily predominate in number of varieties as well as in number of actual specimens. The issues of the supplementary mints of Tyre, Seleucia on the Tigris,

[11] Nos. 32 and 36 are the only exceptions.

and possibly one or two others, are scanty in comparison. Under Antiochus III, on the other hand, while the issues of Antioch are very plentiful and outnumber those of any other one mint, they do not comprise the bulk of his coinage by any means. This is undoubtedly due to the fact that Antiochus' reign was a long one; that his many and great campaigns kept him in the outlying portions of his empire which must have thrown a large part of the burden of coinage for military purposes upon the provincial mints rather than upon Antioch; and lastly his empire was of wide extent comprising many great and populous provinces with their capitals in which, because of the great distance from Antioch, and for reasons of economy which this fact involved, would be struck all money for local needs. When Seleucus came to the throne the empire had shrunk once more to Cilicia, Syria, Phoenicia, and the provinces to the East including Media. The new reign was not a warlike one and its energies were spent in trying to meet the financial drain of the huge indemnity exacted by Rome. It is most natural, therefore, that the coinage should have been principally minted at the capital and greatest city of the kingdom, Antioch.

ANTIOCHUS IV, EPIPHANES, 176/5-165/4 B. C.

The principal activity in the reign of Seleucus IV seems to have been the raising of money to meet the terrible drain of the Roman indemnity. The man who was charged with the thankless task of making the people meet this obligation was a certain Heliodorus, a citizen of Antioch. Not content with the great power he had thus secured he aimed higher and caused the assassination of Seleucus. At this time there was residing[12] in Antioch a younger[13] son of Seleucus, and him Heliodorus caused to be proclaimed king. But there were other and more powerful claimants. After the disastrous battle of Magnesia and the peace terms dictated by the victorious Romans, the younger son of Antiochus III, also named Antiochus, had been sent to Rome as a hostage. A short time previous to the unexpected end of Seleucus IV, at the request of the Roman Senate he sent his own son Demetrius as hostage in place of Antiochus. The latter set out for the East, but on his way stopped at Athens where he seems to have spent some time. It was here that the news of his brother's sudden death reached him.

[12] Diodorus xxx 7, 2.

[13] The oldest son, Demetrius by name, was at this time a hostage in Rome.

He first went to Asia Minor where he was warmly received by Eumenes king of Pergamum who caused him to be crowned with the royal diadem. A powerful army was also placed at his disposal with which to drive out the usurper and such persons as refused to see in him the rightful king of Syria. Details of the campaign are lacking but by the Summer of 175 B. C. we find Antiochus IV safely installed as the Seleucid king in Antioch. The little Antiochus, son of Seleucus IV, was done away with, his minister Heliodorus disappeared.

SERIES I, Circa 176/5–170/69 B. C.

a. Portrait of Antiochus IV.

42 TETRADRACHM.

Obv. Diademed head of Antiochus IV to r. Ends of diadem hang down. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ΑΝΤΙΟΧΟΥ (to l.). Apollo, naked but for chlamis draped over right thigh, seated to l. on omphalos, holds arrow in outstretched r., rests l. on bow. On l., outside inscription, LYRE. In exergue, Φ.

Paris, no. 514, Plate III ; Bunbury Coll., no. 488 (Pl. iv) ; Glasgow (Hunterian Coll.), no. 2 ; Petrograd, no. 329.

43 TETRADRACHM.

Obv. Similar.

Rev. Similar. On r., outside inscription, LYRE. In exergue, Φ.

Glasgow (Hunterian Coll.), no. 3 (Pl. lxvi, 8).

44 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, TRIPOD. On r., outside inscription, LYRE. In exergue, Φ.

London, nos. 3 and 4, Plate III.

b. Portrait of young Antiochus.

45 TETRADRACHM.

Obv. Diademed head of the young Antiochus to r. Ends of diadem hang down. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ΑΝΤΙΟΧΟΥ (to l.). Apollo, naked but for chlamis draped over right thigh, seated to l. on omphalos, holds arrow in outstretched r., and rests l. on bow. On l., outside inscription, TRIPOD. In exergue, ⊢Ρ.

Newell (formerly Hirsch, Philipseh Sale, no. 2901), Plate III; London, no. 1 ; Paris, no. 329; Glasgow (Hunterian Coll.), no. 1 (Pl. lxvii, 1).

46 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, TRIPOD. In exergue,  .

Jameson Coll., no. 1683, Plate III; J. Ward Coll., no. 782 (Pl. xix); Petrograd, no. 383; Sotheby, O'Hagan Sale, 1908, no. 652 (Pl. xi).

47 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, TRIPOD. In exergue, .

Paris, no. 327.

48 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, TRIPOD. In exergue, .

Paris, no. 328; Petrograd, no, 384 (slight variation in monogram).

49 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, TRIPOD. In exergue,  .

Paris, no. 326.

50 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, TRIPOD. In exergue, .

London, no. 2; Glasgow (Hunterian Coll.), no. 2.

51 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, TRIPOD. In exergue, B.

London, no. 3, Plate III; Paris, no. 330 (Pl. viii, 17); Glasgow (Hunterian Coll.), no. 3.

52 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, TRIPOD. In exergue, Δ.

Newell, Plate III; Paris, no. 325.

53 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, TRIPOD. In exergue, .

Petrograd, no. 382.

The first issue of Antiochus IV at Antioch follows the style and appearance of the last issues of Seleucus IV. A symbol is seen in the

left field, while the same monogram, ⅍, as on Seleucus' coins, is in the exergual space.

The coins (nos. 45-53) which bear the childlike features of the young Antiochus, being of unusual character, have been the occasion of much conjecture and controversy and have, in the last fifty years, been assigned to no less than four different persons. Gardiner in the British Museum Catalogue, and Babelon in the Paris Catalogue, have both followed Droysen and given these coins to an Antiochus, son of Seleucus III, known to us only from an inscription. He could have reigned for only a very short time in 223 B. C., that is, in the perturbed period that intervened between the death of Seleucus III and the general acknowledgment of Antiochus III as king. Both Niese[14] and Bevan[15] have discarded this attribution. In fact, style and monograms are both fatal to it. These coins have nothing in common with the known issues of Seleucus III, the fillet border does not appear till the reign of Antiochus III, the monograms and symbol are not common to the coinages of previous rulers or to the first issues of Antiochus III, and, finally, the very existence of this ephemeral personage is doubtful.

It has also been suggested that these coins were struck in honor of the young son, Antiochus by name, whom Antiochus III left behind him as regent in Antioch when he embarked upon his eastern adventures in 212 B. C. I was at first somewhat inclined to follow this theory until a close inspection of the issues of the young Antiochus and of Antiochus III showed more divergence than similarity between them. In the first place the fillet border on the coins of the third Antiochus is large and boldly cut, on those of the little Antiochus it is far less prominent and of very different character; in the second place the reverse surface of the former's coins is flat, of the latter's coins it is distinctly concave; thirdly the two series have not a single monogram in common, and fourthly the symbol TRIPOD, which is also found on certain coins of Antiochus III for Antioch (see no. 24), varies in the two coinages—in the one it stands upon a base, in the other it does not. Finally the fact that the little son of Antiochus III was ten years old when his father left him regent in Antioch would seem fatal to the attribution of these coins to him. The portrait they bear is distinctly that of a very young child not more than two or three years of age. If we forced ourselves to accept this attribution we would have to admit that the coins, because of the childishness of the features, could only have been

[14] Niese, *loc. cit.*, vol. II, p. 777, note to p. 172. [15] Bevan, *loc. cit.*, I, p. 300, note 3.

struck when Antiochus first left Antioch. In other words these pieces must have been struck nearer 212 B. C. than 200 B. C. But for this date their style is too late. Turn now to our Plate III where they have been placed following the coins issued by Seleucus IV. At once the close similarity between these two series becomes evident. Bevan has already drawn attention to the great likeness which exists between the features of Seleucus IV and this little Antiochus.[16] We should also note the same concavity of the reverses, the similarity in treatment of the fillet border, and lastly the fact that the monograms ⊢Ρ and ⊕ are common to both series.

Historical reasons, however, do not permit us to attribute these pieces to the reign of Seleucus, for, although we know he had a second son Antiochus by name, he never made him co-regent, and the eldest son (and therefore heir to the throne) bore the name Demetrius, and was at this time a hostage in Rome. It does not seem likely that coins would be struck with the portrait of a second son unless he had actually been proclaimed a partner in the government.

Bevan[17] would see in these enigmatical pieces issues by the revolting Heliodorus in the name of the little Antiochus whose father he had just murdered. But the fatal objection to this theory lies in the fact that the time during which this Antiochus could have ruled before the arrival of Antiochus IV who claimed the succession and soon made good this claim, was far too short to allow the coin production from one mint to be so great as we know it to have been in this case. The coins with the infant's portrait are too common, consist of too many varieties of dies and monograms, and are of too careful workmanship to make it at all probable that they could have been issued during the few weeks of turmoil and uncertainty that intervened between the death of Seleucus IV and the arrival of Antiochus IV.

Another theory, put forward by Dr. Macdonald in the Jour. Hell. Stud., 23, 111 ff. and Cat. of Hunterian Coll., p. 53, is that these coins were struck by Antiochus IV in honor of his little son Antiochus who later became king and known as Antiochus V Eupator. This theory has been followed here as best fitting both the historical and numismatic evidence at our disposal. It is furthermore supported by the evidence certain Babylonian contract tablets of this period furnish us. The earliest[18] tablet we possess of the reign of Antiochus IV is dated on the

[16] *Loc. cit.*, Vol. II, p. 126, note 1.

[17] Bevan, *loc. cit.*, Vol. II, p. 126, note 1.

[18] Clay, Legal Documents from Erech, N. Y., 1913, Introd., page 14.

22nd day of the 2nd month, 138th year Aer. Sel. (= 174 B. C.) and is in the name of the joint kings Antiochus and Antiochus — evidently Antiochus IV and his eldest son Antiochus. The latest one we have with the *two* names is for the 29th day, 10th month, 142nd year, or 170 B. C. The present writer has in his possession another tablet dated the 6th day, 2nd month, 144th year (or 168 B. C.) *but with only the name of a single Antiochus.* This would seem to show that another tablet published by Dr. Clay and dated 12th day, 6th month, year 146 (or 166 B. C.) and also only bearing the single name Antiochus is to be assigned, not to Antiochus V Eupator as has been thought, but, because our literary sources speak of Antiochus IV reigning until 165/4 B. C., to Antiochus IV. In other words we gather from the evidence furnished by these Babylonian tablets that Antiochus IV associated his infant son with himself in the Government as early as 174 B. C., but by 168 B. C., at the latest, this arrangement, for some reason or other, had been discontinued in favor of his sole kingship. Now it is to just this period of double power that it seems best to assign the earliest tetradrachms which bear the portrait of the elder Antiochus, as well as all those which bear the infant's head. The two series are identical in style and fabric and bear in common the symbol TRIPOD. Probably in conjunction with this series were issued the following bronze coins which have for their obverse type a draped and veiled female bust, for their reverse type an elephant's head to left. All of these pieces have as symbol a TRIPOD, as on our silver issues, and, in addition, the following letters, ΘΕΚ (Hunter), Ω (Hunter), ΙΑ (Hunter), ⊢Ρ (Hunter), Ꭱ (Paris, Plate x, 12), Ꭺ (Paris, no. 487), and one with same types but a serrated edge and letter Δ (Hunter, no. 55). It is to be noted that not only have all these coins the same tripod symbol found on the silver issues but many of them have similar letters or monograms. Bronze coins of similar style and fabric are also to be found struck for Seleucus IV. Therefore the attribution to this period seems corroborated. Now that we also have such a numerous series of bronze coins to place alongside of the tetradrachms with the child's head the possibility of their having all been struck by the shadowy Antiochus, second son of Seleucus IV, in the short time he is supposed to have ruled, rapidly vanishes and we are only left with the alternative of the first years of the joint reigns of Antiochus IV and his son Antiochus.

SERIES II, Circa 169–167 B. C.

a. Regular issues.

54 TETRADRACHM.

Obv. Diademed head of Antiochus IV to r. Ends of diadem hang down and are adorned with STARS. (On some specimens these are not visible being off the flan.) Fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΘΕΟΥ | ΕΠΙΦΑΝΟΥΣ (to l.). Zeus, naked to waist, seated to l. on high-backed throne, holds Nike in outstretched r., rests l. on sceptre. In exergue, Φ.

London, no. 15, Plate III, also nos. 13 and 14; Paris, no. 531; Glasgow (Hunterian Coll.), nos. 21 and 22 (Pl. lxvi, 13); Amer. Num. Soc.; Petrograd, no. 343; J. Ward Coll., no. 786 (Pl. xix); Bunbury Coll., no. 491 (Pl. iv); A. Cahn Sale, xxxv, 1913, no. 210; Egger Sale, Jan., 1908, no. 590 (Pl. xviii); Sotheby, Ashburnham Sale, 1895, no. 211 (Pl. iv).

55 TETRADRACHM.

Obv. Similar. Ends of diadem adorned with stars.

Rev. Similar. In exergue, ΙΣ.

Paris, no. 533, Plate III; Petrograd, no. 344.

56 TETRADRACHM.

Obv. Similar. Ends of diadem adorned with stars.

Rev. Similar, but without monogram or letters.

Newell, Plate IV; London, nos. 11 and 12; Paris, no. 532; Glasgow (Hunterian Coll.), nos. 23 and 24; Amer. Num. Soc.; Jameson Coll., no. 1697 (Pl. lxxxv); Hirsch, Weber Sale, 1908, no. 4066 (Pl. liii).

The peaceful reign of Seleucus now began to bear fruit and the Seleucid Empire once more became a powerful factor in Eastern affairs. Particularly was this the case when Rome became involved in a mighty trial of strength with the Macedonian kingdom of Perseus. Antiochus was thus, to a certain extent, freed from the watchful and ever suspicious eye of Rome and did all that lay within his power to build up and perfect the Syrian army and navy. So successful was he in this that when the Egyptian kingdom, with remarkable lack of judgment and a poor understanding of conditions, attempted to assert the old claim to Coele-Syria and Phoenicia (lost to her under Antiochus III) Antiochus IV in two short and equally successful campaigns routed the Egyptian armies, seized the country from Memphis to the Sea, laid siege to Alexandria and all but captured it. At the last moment Rome, having successfully dealt with Perseus and being in no mind to see Egypt subject to Antiochus, intervened and forced a peace between the two kingdoms. Antiochus was thus cheated of his prize but gained immense prestige.

It was during these Egyptian campaigns that the preceding coins were probably struck. As the Babylonian contract tablets show us Antiochus was now reigning alone[19] and so the coins bear only his portrait.

The new types which were now introduced in the Seleucid coinage by Antiochus IV are interesting as they are so intimately associated both with the events of the time and with the personality, political aims, and aspirations of Antiochus himself. Brought up in Rome, inspired by Greek learning and ideals, quickened by his sojourn in Athens, the intellectual metropolis of all true Hellenes, Antiochus IV considered himself the foremost champion of Hellenism in the East. He attempted to imbue his oriental subjects with this spirit, to conform their customs to this ideal, and more or less to standardize their innumerable local cults to one common form of worship. To focus their worship on some Hellenic deity, as near like the local divinities as possible, was his solution of the problem. Zeus Olympios, the nearest to the innumerable Baals or Baalim that had come down from the earliest days in every township of the kingdom, therefore became the leading and, one might say, the official god of the Empire. Not content with this, Antiochus seems to have identified himself with Zeus, to have presented himself to the people as the "effulgence in human form of the Divine, a god manifest in the flesh."[20] For it is thus that he styles himself upon these new coin issues: Θεὸς Ἐπιφανής, the God manifest. Most appropriately the type chosen for the tetradrachms was that of Olympian Zeus, now become the great Divinity of the Seleucid empire, to whom Antiochus had commenced the erection at Athens of a magnificent and colossal temple but destined never to be finished until the time of Hadrian. On the citadel at Antioch another sumptuous temple, adorned with plates of gold, was dedicated to Jupiter Capitolinus; in the great temple of Apollo at Daphne a statue as near like the masterpiece of Pheidias at Olympia was set up; the temple of Jehovah in Jerusalem was rededicated to Zeus Olympios; the temple to Jehovah in Shechem in Samaria to Zeus Xenios. To make his own divine nature evident upon the coinage, Antiochus caused stars to be placed upon the ends of his diadem on the silver issues, and divine rays about his head on the bronze. Upon the reverses of the new tetradrachms is placed a close copy of the Zeus Olympios of Pheidias, the God seated in divine splendor holding a wreath-bearing Nike in his right hand,

[19] See above, page 21.

[20] Bevan, *loc. cit.*, Vol. II, page 154.

the God whose representative upon earth Antiochus claimed himself to be, the God who was to be the supreme divinity, the composite of all local gods, the emblem of the Syrian kingdom.

There are also bronze coins, consisting of two denominations, that appear to belong to this period. The larger has the radiated head of Antiochus on the obverse, and a standing figure of Zeus holding a sceptre on the reverse (B. M. Cat. Pl. xii, no. 6). The smaller denomination has a similar head upon the obverse and upon the reverse an advancing figure of Apollo holding a bow in his outstretched left and drawing an arrow from the quiver at his shoulder with his right (B. M. Cat. Pl. xii, no. 8). The specimen of this latter type in the writer's collection, corroborates the attribution to Antioch, as these types are restruck over an older coin with a veiled female bust on the obverse and an elephant's head upon the reverse — a coin which we have seen (page 21) is to be attributed to this mint for the first part of Antiochus' reign. The inscription on these two denominations is the same as on the tetradrachms, that is ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ ΘΕΟΥ ΕΠΙΦΑΝΟΥΣ. The style of the head is also identical with that of the silver issues. Because of similarity of style and types the municipal issues of Antioch (fig. 1) with the inscription ΑΝΤΙΟΧΕΩΝ ΤΩΝ ΠΡΟΣ ΔΑΦΝΗΙ (B. M. Cat. nos. 61 to 71) should also be assigned to about this period. The tripod, which appears as an adjunct symbol on many of these bronze pieces should be compared with the same symbol on the tetradrachms of Series I.

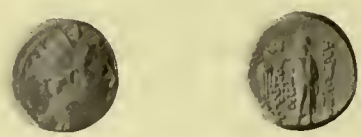


Fig. 1.

SERIES II, Circa 168 B. C.

b. Commemorative Issues.

57 DRACHM.

Obv. Diademed head of Antiochus IV to r. Ends of diadem hang down and are adorned with STARS. Border of dots.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΘΕΟΥ | ΕΠΙΦΑΝΟΥΣ (to l.). Eagle standing to r. on thunderbolt.

Glasgow (Hunterian Coll.), no. 51, Plate IV.

58 BRONZE (Denomination I).

Obv. Head of Zeus-Serapis to r. wearing laurel wreath. Border of dots.

Rev. Inscription and types as on no. 57.

Paris, Pl. xiii, no. 14.

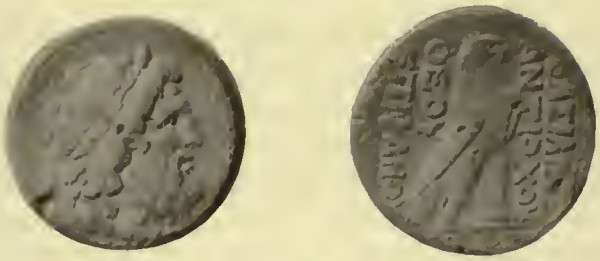


Fig. 2.

59 BRONZE. (Denomination II).

Obv. Head of Zeus-Serapis as on no. 58. *Rev.* Inscription and types as on no. 57.

London, Pl. xii, no. 11. (Fig. 2.)



Fig. 3.

60 BRONZE (Denomination III).

Obv. Bust of Isis wearing corn-wreath ending above in symbol of Isis. Circle of dots. *Rev.* Inscription and types as on no. 57.

London, Pl. xii, no. 12. (Fig. 3.)



Fig. 4.

61 BRONZE (Denomination IV).

Obv. Radiated head of Antiochus IV to r. Border of dots. *Rev.* Inscription and types as on no. 57.

London, Pl. xii, no. 13. (Fig. 4.)

A full list of the known specimens of these most interesting coins can be found in Svoronos Τὰ νομίσματα τῶν πτολεμαίων. The drachm no. 57 is the key to the time and place of minting. Comparing it with the tetradrachms as illustrated on Plate IV it will be seen that it is of identical style and fabric. Particularly noticeable are the two STARS which adorn the ends of the diadem — the characteristic emblem of this issue. Following the custom prevalent since the time of Antiochus III the drachm has a beaded border, leaving the fillet border to the tetra-

drachms. The reverse type of the eagle standing upon the thunderbolt of Zeus serves, perhaps, a double purpose. On the one hand, being the well-known symbol adopted by the Ptolemies of Egypt for their far-travelling coins, its sudden and passing appearance upon the coins of Antiochus IV no doubt celebrates the contemporary triumphs over the Egyptian kingdom, on the other hand it is but a condensed form of the type of Zeus Nikephoros of the tetradrachms, and is therefore emblematic of the great Hellenic god, now the leading divinity of the Seleucid kingdom.

Accompanying this drachm and belonging to the same mint and date is the well-known series of bronze coins in four denominations described above under nos. 58 to 61. On account of their several types, which offer a definite and undoubted allusion to the victorious Egyptian campaigns of Antiochus IV, these pieces have ever been thought of as having been struck in Egypt itself. There are, however, many objections to this view which, when taken together, would seem fatal to its final acceptance. In the first place it is evident that these bronze coins cannot be separated from the drachm no. 57, as they resemble it in style and particularly in absolute identity of their inscriptions and reverse type. This drachm, however, as we have seen above, is too closely allied to the tetradrachms nos. 54, 55, and 56 to be thus easily separated from them and attributed to a distant mint in an alien country. The bronze coins themselves are comparatively common (Svoronos has altogether enumerated as many as 107 pieces) while Antiochus' stay in Egypt was of short duration, and sufficient opportunity to issue so many coins (which there undoubtedly were, since they furnish us with so many examples) would seem to be lacking. Furthermore, if these coins had been struck in Egypt[21] and distributed to the people, as has been supposed, they would have been principally used in that country and consequently *found* there to-day. Of the seven specimens in the writer's collection every one came to him from sources other than Egyptian, and this though on three separate occasions he spent several months in Egypt diligently collecting many thousands of coins. This is not meant to imply that these particular varieties are *never* found in Egypt — but that the writer has never seen any there or has never heard of any having been found there. In addition, four of the seven pieces in his collection were secured from definitely Syrian sources, another shows a patina (shiny black surface with reddish colored

[21] Babelon, Introduction, page c.

earth adhering) which is peculiarly Syrian and once seen can never be mistaken; and, as a whole, none of them show an appearance or patina generally associated with coins found in Egypt. Of the two specimens in the Yale collection of this type one was secured in Constantinople and the other came by purchase from Syria (probably Marash). There are several specimens in the collection of Prof. Torrey at Yale whose collection was formed in Jerusalem and the Syrian coast. Of all the 107 specimens enumerated by Svoronos only two are mentioned as belonging to an Egyptian collection, but not therefore necessarily *found* in Egypt. In other words, with such material as is available at the present time, no reference can be found of coins of this type having ever been unearthed in Egypt. In comparing these pieces with contemporary issues of the Egyptian mints no similarity except, in a general way, in types and weights, can be found. Their fabric is utterly unlike anything known for Egypt, but closely approaches the bronze issues we know to have been struck at this time in Syrian mints. The only coin that can definitely be assigned to Egypt for the period of Antiochus' sojourn there is the unique piece in M. Dattari's (Svoronos, *loc. cit.*, Vol. II, p. 234, no. 1422, Pl. xlviii, 7) collection which by style and types is undoubtedly of Egyptian origin, but utterly unlike the pieces now under discussion. Because both style and fabric of these four remarkable bronze coins are so at variance with a coin which we know to have certainly been struck in Egypt at this time, because such records of provenance as happen to be at our disposal point to Syria and not to Egypt, and because of the difficulties of time and opportunity, therefore our conclusion must be that the bronze coins nos. 58-61 can not possibly have been struck in Egypt. We must even go further and definitely assign them to the mint at Antioch because of the drachm no. 57. This piece can neither be separated from the bronze coins because of type and inscription, nor from the tetradrachms nos. 54-56 because of style, inscription, and the star adorned diadem. These tetradrachms, finally, can only be assigned to Antioch because of sequence of style and the continued appearance of the characteristic monogram ⊕ on the preceding Antiochene issues of Seleucus IV and Antiochus IV, as well as the succeeding issues of Antiochus IV, Antiochus V, and Demetrius I. The entire issue, on account of its unusual types and denominations, was evidently a commemorative one to celebrate the victories won over the Ptolemaic armies in 169 and 168 B. C.

SERIES III, Circa 167–165/4.

a. Commemorative Issues for 167 B. C.

62 GOLD STATER.

Obv. Diademed head of Antiochus IV to r. Ends of diadem hang down. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΘΕΟΥ | ΕΠΙΦΑΝΟΥΣ (to l.) ΝΙΚΗΦΟΡΟΥ (in exergue). Zeus Olympios enthroned to l., naked to waist, legs placed parallel, holds wreath-bearing Nike in outstretched r., rests l. on sceptre.

Paris, no. 534, Plate IV ; London (dotted border)=Num. Chron., Ser. IV, Vol. XII, 1912, no. 27 (Pl. vii, 11).

63 TETRADRACHM.

Obv. Laureated head of Zeus to r. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΘΕΟΥ | ΕΠΙΦΑΝΟΥΣ (to l.) ΝΙΚΗΦΟΡΟΥ (in exergue). Zeus Olympios as on preceding coin. The figure of Nike is sometimes to r. as on the tetradrachms of the previous issues, sometimes to l. as on the remainder of the coins of this issue.

Paris, no. 544, Plate IV, nos. 545 and 546 ; London, no. 22 (Pl. xi, 9) ; Glasgow (Hunterian Coll.), no. 50 ; Newell ; Egger Sale xli, no. 684 (Pl. xix) ; Jameson Coll., no 1700 (Pl. lxxxv), formerly Sotheby, Rome Sale, no. 165 ; Petrograd, no. 349.

64 TETRADRACHM.

Obv. Laureated head of Apollo to r. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ | ΘΕΟΥ (to r.) ΕΠΙΦΑΝΟΥΣ | ΝΙΚΗΦΟΡΟΥ (to l.). Apollo Kitharoedos to r., in long robes, holding lyre in l., and patera in outstretched r.

Jameson Coll., no. 1699, formerly Hirsch, Weber Sale, no. 4069, Plate IV ; Paris, no. 547 (Pl. xii, 12).

65 HEMIDRACHM.

Obv. Radiated and diademed head of Antiochus IV to r. Border of dots.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΘΕΟΥ | ΕΠΙΦΑΝΟΥΣ (to l.). Medusa head upon Aegis.

Paris, no. 529, Plate IV, no. 530 ; Glasgow (Hunterian Coll.), no. 27 ; Coll. L. Walcher de Molthein, 1895, no. 2935 (Pl. xxv).

66 DIOBOL.

Obv. Similar to preceding.

Rev. Inscription as on preceding coin. Tripod on base.

London, no. 10, Plate IV.

b. Regular Issues for 167–165/4 B. C.

67 TETRADRACHM.

Obv. Diademed head of Antiochus IV to r. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΘΕΟΥ | ΕΠΙΦΑΝΟΥΣ (to l.) ΝΙΚΗΦΟΡΟΥ (in exergue). Zeus Olympios, naked to waist, one end of chlamis draped over left shoulder, legs parallel, holds wreath-bearing Nike in outstretched r., rests l. on sceptre. On l., outside inscription, Ϟ.

London, nos. 17 and 18; Paris, no. 536 (Pl. xii, 10); Newell; Glasgow (Hunterian Coll.), no. 47; Sotheby, American Artist Sale, 1910, no. 119, Plate IV; Egger Sale, Jan. 7, 1908, no. 591 (Pl. xviii); Coll. Walcher de Molthein, 1895, no. 2934 (Pl. xxv); Rome, Strozzi Sale, 1907, no. 1669 (Pl. xi).

68 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ΙΣ.

London, no. 16; Egger Sale xlv, 1913, no. 674 (Pl. xix).

69 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ϟ.

Newell, Plate IV.

70 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ⋔.

Sotheby, Butler Sale, no. 250, Plate IV; Glasgow (Hunterian Coll.), no. 48; Paris, no. 539.

71 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ⊡.

Amer. Num. Soc.

72 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ⊓.

Paris, nos. 535, 537 and 538; Petrograd, no. 345.

73 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Μ.

Glasgow (Hunterian Coll.), no. 49 (Pl. lxvi, 18); Egger, Sale xli, no. 682 (Pl. xix).

In the Spring of 167 B. C. Antiochus, having safely returned from his Egyptian campaigns, sent messengers and deputations throughout the Greek world, inviting all and sundry to attend the magnificent games and other festivities shortly to be held near Antioch in honor of his recent achievements. Antiochus spared no expense to make this celebration a unique one of its kind. Our historians dilate upon the magnificence of the processions, the sumptuousness of the costumes and trappings, the extravagance of the displays and spectacles attending the festivities. It was undoubtedly on this auspicious occasion, to add to the general display and perhaps to furnish keepsakes for the countless visitors from distant lands, that Antiochus caused the commemorative series of coins to be struck which we have collected under nos. 62 to 66. On these coins we see the title *νικηφόρος* added to the already formidable and grandiloquent array, a title distinctly and unmistakably alluding to the great victories achieved in Egypt, and furnishing us with the final evidence needed to connect these coins with the celebrations of 167 B. C.

As the games and festivities were held ostensibly in honor of Apollo, the supposed progenitor of the House of Seleucus and its patron god, and of Zeus Olympios Nikephoros, now the chief divinity of the Seleucid empire, the scene of the celebration was most appropriately the beautiful grove and great temple of Apollo at Daphne, just outside the walls of Antioch. Here was located the famous colossal statue of that god, the work of Bryaxis, made of gold and wood with head and arms of marble. In this temple, too, Antiochus as we know, had shortly before erected a close copy of the chryselephantine statue of Zeus at Olympia, the masterpiece of Pheidias. The special types chosen for the tetradrachms of the commemorative issues perpetuate these two famous statues. On no. 63 we see the laurel crowned head of the Olympian Zeus with his smiling and benignant features, on the reverse of the same coin is displayed the entire statue of the god enthroned, holding out in his hand a wreath-bearing Nike. On no. 64 we see on the obverse the head of the Apollo statue, on the reverse the statue itself, Apollo Kitharoedos in long robes, holding lyre and patera.

Small coins of rather unusual denominations, for the Seleucid series, seem also to have been struck. On nos. 65 and 66 the king's head, surrounded with the divine rays, adorns the obverse, the reverse type of the hemidrachm is Athene's aegis adorned with the Gorgo head, perhaps similar to one in gold set up by Antiochus in Athens;

the reverse type of the diobol is Apollo's tripod. These two small denominations have been associated here with the larger pieces of special type because of the peculiarity of their types and because of the tripod which would seem to connect the smaller of the two, at least, with the Apolline tetradrachm. On both of these pieces the title νικηφόρος has been omitted, perhaps on account of lack of room. In the bronze coin with the reverse type of the Aegis, illustrated in the British Museum Catalogue, Pl. xii, no. 7, we have a contemporary issue in this metal. To the writer, however, it seems quite probable that at the time of the great celebrations at Antioch the special issues in bronze with peculiarly Egyptian types (described above under nos. 58 to 61) continued still to be issued. Their types are so especially appropriate to an occasion particularly celebrating the Egyptian victories of the king that their issue at this time would seem most likely. They have been catalogued under the immediately preceding period only because the silver drachm (no. 57) — from which they can not well be separated — belongs by style and fabric and by the star adorned diadem, to the coins of Series II, and because the inscriptions on all of these pieces omit the title νικηφόρος which is the particular characteristic of Series III. Because their types were so peculiarly appropriate to the celebrations of 167 B. C. it is quite possible that their issue was continued. In support of this it must be noted that we have no bronze coins at all of Antiochus IV inscribed with the νικηφόρος title. It is reasonable to suppose, however, that bronze coins were issued after 167 B. C.; and, if so, that it was these particular pieces because of the very appropriateness of their types celebrating the Egyptian victories.

The gold stater no. 62 has been assigned to the commemorative series because of the νικηφόρος title it bears and because, after the reign of Antiochus II, the appearance of gold issues in the Seleucid series always has something of the unusual about it. To augment the ostentation and sumptuous display of the great occasion, what better symbol of his wealth and power could Antiochus devise than to strike and distribute specimens of the beautiful gold stater seen on Plate IV, with the king's portrait on the obverse and Zeus Nikephoros enthroned upon the reverse?

Throughout this third period of coinage tetradrachms of the usual type continue also to be struck. They vary from those of Series II only in the fact that stars are no longer visible on the diadem ends, that the title νικηφόρος is always found in their exergues, and that the legs of the

Zeus figure are always parallel and not crossed as they were in the previous issue. While the commemorative issues appearing at Antioch in the summer of 167 B. C. bear no magistrate's letters or monograms, the regular coinage, continuing from this date to the end of Antiochus' reign, display them as usual. Among them we find Φ and ΙΣ of Series II and also a new one Π, whose owner is destined to hold office through several succeeding reigns.

ANTIOCHUS V EUPATOR, 164-162 B. C.

The unexpected and unfortunate death of Antiochus IV brought his young son to the throne, a child of but nine or ten years of age. He is known to history as Antiochus V and was given the surname Eupator.

At this time, it must be remembered, there still resided at Rome the son of Seleucus IV, Demetrius by name. But Demetrius in 175 B. C., by the swift action of his uncle Antiochus IV in hastening from Athens to Asia where he was immediately proclaimed king, had been forestalled in claiming the succession to the Seleucid throne. This prince, now grown into an ambitious and capable young man of twenty-three, enjoyed the friendship of many very influential Romans (among them our principal historian of this very period, Polybius) and formed a striking figure in the life of Rome. He naturally looked askance at what would seem to him the usurpation of a throne which by all rights was his. He sought, by every means at his command and with the help of his influential friends, to induce the Senate to acknowledge him king in the place of the boy Antiochus Eupator. The Senate, however, preferred to see the Seleucid kingdom at a disadvantage under the rule of a mere child, and so rejected Demetrius' petitions or returned evasive answers, while at the same time keeping a strict watch over his movements. In the meanwhile, in Syria, affairs were more or less in constant turmoil due to the machinations of various would-be regents and ambitious generals, each trying to turn to his own advantage the weakness of the child ruler, Antiochus; while serious rebellion in Judea and incipient revolt in Antioch kept matters in suspense.

To add to this, there arrived at Antioch in the year 163 B. C. Gnaeus Octavius, ambassador from Rome, sent to watch Seleucid

affairs, to block any attempt to increase the kingdom's power, and if possible and in the interests of Rome to destroy the elephants or any other asset of material strength the Syrian kingdom might still possess. So well and so harshly did Octavius follow the Senate's behest that he soon raised a storm of popular indignation against himself, in the course of which he was suddenly assassinated, an event which naturally brought Syria and Rome to the brink of war. At this juncture the young Demetrius seized the opportunity to escape from Rome — a dramatic incident vividly related to us by Polybius who himself was among the conspirators. Demetrius arrived safely in Palestine, and was enthusiastically welcomed by the people, now wearied with continual wars and the troubles due to the conflicting ambitions of various generals uncurbed by the too youthful Antiochus. Demetrius soon swept all before him and Antiochus V was murdered while trying to oppose him just outside the walls of Antioch, 162 B. C.

The short coinage at Antioch of the boy-king Antiochus V, is represented by the following coins:

74 TETRADRACHM.

Obv. Diademed head of Antiochus V to r. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ΑΝΤΙΟΧΟΥ (to l.) ΕΥΠΑΤΟΡΟΣ (in exergue). Zeus Olympios, as on the issues of Antiochus IV, enthroned to l., naked to waist, one end of chlamis over shoulder, holds wreath-bearing Nike in outstretched r., rests l. on sceptre. On l., outside inscription, ♣.

London, no. 3, Plate IV, also no. 4; Sotheby, Butler Sale, no. 253 (Pl. vi); Egger Sale, Nov., 1909, no. 421 (Pl. xv); Petrograd, nos. 386 and 387; Coll. L. Walcher de Molthein, 1895, no. 2944 (Pl. xxvi); Hirsch, xxxiii, 1913, no. 899 (Pl. xxi); Sotheby, Cumberland Clark Sale, 1914, no. 266 (Pl. vii); Sotheby, Ashburnham Sale, 1895, no. 212 (Pl. v).

75 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Π.

London, nos. 5 and 6, Plate IV; Glasgow (Hunterian Coll.), nos. 4 and 5; Newell; Bunbury Sale, no. 495, now Jameson Coll., no. 1701 (Pl. xxvi); Paris, nos. 695 and 696 (Pl. xv, 9); Egger Sale xli, 1912, no. 686 (Pl. xix); Hirsch xxv, Philipsen, 1909, no. 2902 (Pl. xxxiii); Hirsch, Weber Sale, 1908, no. 4072 (Pl. liii); Amer. Num. Soc.; Egger Sale, Jan., 1908, no. 594 (Pl. xviii); Petrograd, no. 385; Coll. L. Walcher de Molthein, 1895, no. 2945 (Pl. xxvi).

76 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, ΔΙ.

Newell, Plate IV ; Egger Sale, Jan., 1908, no. 595 (Pl. xviii).

77 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, ⊢Ρ.

J. Ward Coll., no. 787, Plate IV.

77a TETRADRACHM.

Obv. Similar (same die as Plate IV, 77). *Rev.* Similar. In exergue, Α.

Electrotype in author's collection, present whereabouts of original unknown.

78 DRACHM.

Obv. Similar, but border of dots. *Rev.* Similar.

Glasgow (Hunterian Coll.), no. 6 (Pl. lxvii, no. 2)

The coinage for Antioch, comprising the above varieties, struck in the name of Antiochus V Eupator very closely follows the last coinages of his father in style and fabric. The two magistrates ⊕ and ΠΙ were also continued from the preceding issues.

DEMETRIUS I SOTER, 162-150 B. C.

Immediately after establishing himself firmly upon his throne at Antioch, Demetrius proceeded to reconquer the Babylonian provinces which had fallen away from the kingdom under the preceding reign. He soon overcame Timarchus, who had seized the Diadem, and was enthusiastically welcomed by the populace of Seleucia on the Tigris who hailed him as Saviour. It was here, in about the year 160 B. C., that Demetrius first received the title of Soter.

SERIES I, Circa 162–156 B. C.

a. Early Issues 1.

79 TETRADRACHM.

Obv. Young head of Demetrius, diademed, to r. in laurel-wreath circle.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ΔΗΜΗΤΡΙΟΥ (to l.). Tyche, naked to waist, seated to l. on cippus adorned with two winged monsters whose bodies end in scrolls or fishes tails, holds sceptre in outstretched r. and cornucopiae in l. On l. outside inscription, ⊕.

Bunbury Coll., no. 499, Plate V ; Newell (same obverse and reverse dies as preceding specimen. The monogram ⊕ has been recut over another, perhaps Α).

80 TETRADRACHM.

Obv. Similar.

Rev. Similar, but Tyche (also naked to waist) seated on throne, only one leg of which is to be seen. This has form of a winged lion's leg. On l., outside inscription, ⅄.

J. Ward Coll., no. 788, Plate V.

81 TETRADRACHM.

Obv. Similar.

Rev. Similar, but Tyche is completely draped and leg of throne has the form of a winged monster whose extremities end in scrolls. On l., outside inscripsion, Ш.

Newell; London, no. 33, Plate V; Paris, no. 709; Petrograd, nos. 391 and 392; Glasgow (Hunterian Coll.), no. 4; Hirsch Sale xix, Nov., 1907, no. 599, Plate V.

b. Early Issues 2.

82 TETRADRACHM.

Obv. Diademed head of Demetrius as before but of lower relief.

Rev. Tyche as on no. 81. On l., outside inscription, ⍓.

Newell, Plate V; Egger Sale xlvi, 1914, no. 2448 (Pl. xxxix).

NOTE. — Probably the tetradrachm of Demetrius I, no. 29, on page 47 of the British Museum Catalogue, should be inserted here because it appears to bear the same monogram as our tetradrachm no. 77a (Antiochus V). As the attribution to Antioch would also depend upon the style and fabric of the piece, it has not been included here because of the impossibility of securing a cast at the present time.

83 TETRADRACHM.

Obv. Similar to no. 82.

Rev. Tyche as on no. 81 but of smaller proportions. On l., outside inscription, ⅄.

Newell, Plate V; London, no. 32; Petrograd, no. 397 (without casts of these last two pieces it is impossible to determine whether they belong here or under nos. 79 and 80).

84 TETRADRACHM.

Obv. Similar to no. 82.

Rev. Similar to no. 83. In exergue, Ш.

Newell, Plate V; Paris, no. 710; Petrograd, no. 393; London, no. 34; Coll. L. Walcher de Molthein, 1895, no. 2949 (Pl. xxvi); Hirsch xix, 1908, no. 599 (Pl. xv).

85 TETRADRACHM.

Obv. Similar to no. 82.

Rev. Similar to no. 83. In exergue, Λ.

Glasgow (Hunterian Coll., Pl. lxvii, no. 4), no. 5; Paris, no. 715.

c. Later Issues.

86 TETRADRACHM.

Obv. Older head of modified style and higher relief. *Rev.* Similar to no. 82. On l., outside inscription, Φ.

Cumberland-Clark Sale, 1914, no. 269, Plate V.

87 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, ⋈ or ⋈.

Amer. Num. Soc., Plate V ; Paris, nos. 712 and 713 ; London, no. 27 ; Petrograd, no. 394.

88 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, ⍓.

Paris, no. 717 ; Merzbacher Sale, Nov., 1910, no. 826 (Pl. 14).

89 TETRADRACHM.

Obv. Similar. *Rev.* Similar. No monogram.

Newell, Plate V ; London, no. 25.

90 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, ⍋.

Hirsch, Sale xxxiii, 1913, no. 901 (formerly Egger, Sale Jan. 7, 1908, no. 596) Plate V.

91 TETRADRACHM.

Obv. Similar. *Rev.* Similar to no. 89. On l., outside inscription, ⍓.

Paris, no. 711 (Pl. xvi, no. 3) ; London, no. 31.

92 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, ⍋.

Newell, Plate V ; London, no. 26 ; Glasgow (Hunterian Coll.), no. 2.

93 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, EY.

Newell, Plate VI.

94 TETRADRACHM.

Obv. Similar. *Rev.* Similar. In exergue, EI.

Newell, Plate VI.

The mint at Antioch, upon the arrival of Demetrius, immediately began the coining of tetradrachms bearing the portrait, name, and types of the new king. The two magistrates ⚓ and Π, who had officiated under Antiochus V, were evidently left in office and display their monograms upon the new coinage. There are several reasons for placing nos. 79, 80, and 81 at this particular point and so seeing in them the first coinages in Antioch of Demetrius. In the first place his features are more youthful than on any of his other coins; the figure of Tyche on nos. 79 and 80 is undraped to the waist, a peculiarity not found on any of the later coinages and therefore most likely to occur at the commencement when details of the type had not yet become fixed; the throne too, has not yet become stereotyped, for on no. 79 we see what appears to be a cippus decorated with the winged monsters which by no. 81 have become the sole support of Tyche and therefore unexplainable without this coin to serve as a prototype; and, finally, the same magistrates are functioning as under the preceding reign. On the obverse, instead of the fillet border as on the coinages of Antiochus III to V, we find a laurel wreath border. This innovation may perhaps be more or less directly due to the final successes which Demetrius gained over his adversaries just outside the walls of Antioch. It is quite possible that he actually attributed his victory to Apollo. For it must be remembered that Apollo had been, par excellence, the patron divinity of the Seleucid dynasty down through the reign of Seleucus IV. Antiochus IV Epiphanes, however, seems to have caused Apollo's worship to become of secondary importance in favor of Zeus Olympios. As a type Apollo was almost completely ousted from the Seleucid coinage during the reigns of Epiphanes and his son Antiochus V. With the return to power of the legitimate branch, in the person of Demetrius, Zeus disappears until the succeeding reign when Alexander Balas (who gave himself out as a second son of Epiphanes) replaces Zeus and discards Apollo. Demetrius II, son of Demetrius I, succeeds Alexander and once more Apollo assumes his rightful place. It is quite possible that in the tetradrachm illustrated in the British Museum Catalogue, Pl. xiv, no. 3, we should recognize the first coinage of Demetrius Soter upon his capture of Antioch. There is considerable artistic affinity between the head on this coin and the heads on our nos. 79, 80, and 81 to support this suggestion. If this is the case then Apollo was actually introduced again on the earliest of Demetrius' coinages to suggest the return of the legitimate branch. When Demetrius finally decided upon

a type of more personal significance (is the female divinity on his later coins really intended to be Demeter?) the favor of Apollo was still retained by placing that god's symbolic plant, the laurel, on the obverse in the form of a wreath surrounding the king's portrait, a procedure that at the same time, immortalizes Demetrius as the Victor.

The exact significance of the reverse type of the seated goddess has never been satisfactorily explained. It is even uncertain whether the figure is intended to be that of a Tyche or of Demeter. The fact that she is partially undraped on the earliest coins would seem inimical to either explanation, particularly so to the latter. It seems almost certainly to have been copied from some statue but from what one or why is still an enigma.

The coins have been roughly classed in what appears to have been their general order of appearance. The details of the several issues have only been worked out in a general way as the writer has had at his disposal only such pieces as have been illustrated in the various catalogues or exist in actual specimens in American collections.

SERIES II, Circa 156–155 B. C.

a. First Issue.

95 TETRADRACHM.

Obv. Diademed head of Demetrius to r. Laurel wreath border.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ΔΗΜΗΤΡΙΟΥ (to l.). Tyche as on no. 94. On l., outside inscription, Α.

London, no. 30; Paris, no. 716; Petrograd, nos. 395/6; London (see Num. Chron., Ser. III, vol. X, 1890, Pl. xix, 19).

96 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Α.

Amer. Num. Soc., Plate VI; Glasgow (Hunterian Coll.), no. 3; Paris, no. 718.

97 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ΗΡ.

London, no. 28; Paris, no. 719.

98 TETRADRACHM.

Obv. Similar.

Rev. Similar. In exergue, ΗΡ.

Paris, no. 720; Glasgow (Hunterian Coll.), no. 6; Newell, Plate VI.

b. Second Issue with title Σωτήρ.

99 TETRADRACHM.

Obv. Similar.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ΔΗΜΗΤΡΙΟΥ | ΣΩΤΗΡΟΣ (to l). Tyche as on no. 95. On l., outside inscription, ⍓.

Sotheby, Headlam Sale, May, 1916, no. 442, Plate VI; Newell.

100 TETRADRACHM.

Obv. Similar.

Rev. Similar to preceding. On l., outside inscription, ⍓.

Newell, Plate VI; London, no. 23.

101 TETRADRACHM.

Obv. Similar.

Rev. Similar. In exergue, ⊢ϝ.

London, no. 24; Egger Sale xlvi, 1914, no. 2454 (Pl. xxxix).

By their monograms and the style of their reverse dies the coins of Series II are the immediate forerunners of the dated coins we will study in the next paragraph. The title Σωτήρ also links these coins with those that follow. Although this title had already appeared upon the Babylonian issues of Demetrius (it was given him by the people of Seleucia on the Tigris as early as 160 B. C.) it does not appear upon the coinage of the Antiochene mint until about 155 B. C. as proved by the succeeding pieces — which bear the date ΗΝΡ of the Seleucid Era, — that is from October 155 to the end of September 154 B. C.

SERIES III, 155–150 B. C.

a. Dated ΗΝΡ Oct. 155 to Oct. 154.

102 TETRADRACHM.

Obv. Diademed head of Demetrius to r. Laurel wreath border.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ΔΗΜΗΤΡΙΟΥ ΣΩΤΗΡΟΣ (to l.). Draped figure of Tyche seated to l. on throne the back leg of which consists of winged monster the body of which ends in two scrolls. Tyche holds short sceptre in outstretched r., and cornucopiae in l. On l., outside inscription, ⍈ | ⍓. In exergue, ΗΝΡ.

London, no. 6; Newell; Paris, no. 742.

103 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ⍈ | ⍓. In exergue, ΗΝΡ.

London, no. 10; Paris, no. 743; Petrograd, no. 424; Hirsch, Hoskier Sale, 1907, no. 438, Plate VI.

104 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, 𐅄 | ⊢Ρ. In exergue, HNP.

London, no. 13; Newell; Glasgow (Hunterian Coll.), no. 18.

105 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, 𐅄 | MI. In exergue, HNP.

Paris, no. 741.

b. Dated ΘNP Oct. 154 to Oct. 153.

106 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, 𐅄 | ⍓. In exergue, ΘNP.

London, no. 7; Paris, no. 745; Petrograd, no. 425; Jameson Coll., no. 1702 (Pl. lxxxvi).

107 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, 𐅄 | ⍲. In exergue, ΘNP.

Newell; Paris, no. 747; Yale Univ. Coll.

108 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, 𐅄 | ⊢Ρ. In exergue, ΘNP.

Newell, **Plate VI**; London, no. 14.

109 DRACHM.

Obv. Head as above, but in fillet border. *Rev.* ΒΑΣΙΛΕΩΣ (to r.) ΔΗΜΗΤΡΙΟΥ ΣΩΤΗΡΟΣ (to l.). Cornucopiae. Below, 𐅄 ⍲ | ΘNP.

Newell, **Plate VII**; Paris, no. 746; Glasgow (Hunterian Coll.), no. 22; Egger Sale xlv, 1913, no. 682 (Pl. xix).

110 DRACHM.

Obv. Similar. *Rev.* Similar. Below, 𐅄 ⊢Ρ | ΘNP.

London, no. 36.

c. Dated ΞP Oct. 153 to Oct 152.

111 TETRADRACHM.

Obv. Similar to no. 102. *Rev.* Similar to no. 102. On l., outside inscription, 𐅄 | ⍓. In exergue, ΞP.

Newell, **Plate VI**; London, no. 8; Paris, no. 748.

112 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, 𐡀 | 𐡍. In exergue, ΞP.

Newell; London, no. 11; Paris, no. 750.

113 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, 𐡀 | 𐡓. In exergue, ΞP.

London, nos. 15 and 16; Paris, no. 752; Petrograd, nos. 429 and 430.

114 DRACHM.

Obv. Similar to no. 109. *Rev.* Similar to no. 109. Below, 𐡀 𐡄 | ΞP.

London, no. 39; Paris, no. 749; Petrograd, no. 427; Newell; Coll. L. Walcher de Molthein, 1895, no. 2955 (Pl. xxvi); Yale Univ. Coll.

115 DRACHM.

Obv. Similar. *Rev.* Similar. Below, 𐡀 𐡍 | ΞP.

Newell; Paris, no. 751; Petrograd, no. 428; Egger Sale xli, no. 694 (Pl. vii); Glasgow (Hunterian Coll.), no. 23.

116 DRACHM.

Obv. Similar. *Rev.* Similar. Below, 𐡀 𐡓 | ΞP.

Paris, nos. 753 (Pl. xvi, no. 15) and 754; Glasgow (Hunterian Coll.), no. 24; Yale Univ. Coll.

d. Dated AΞP Oct. 152 to Oct. 151 B. C.

1st Issue.

117 TETRADRACHM.

Obv. Similar to no. 103. *Rev.* Similar to no. 103. On l., outside inscription, 𐡀 | 𐡄. In exergue, AΞP.

London, no. 9.

118 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, 𐡀 | 𐡍. In exergue, AΞP.

London, no. 12, Plate VI; Paris, no. 756; Newell.

119 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, 𐡀 | 𐡓. In exergue, AΞP.

London, nos. 17 and 18; Paris, no. 755; Petrograd, no. 431; Newell; Coll. L. Walcher de Molthein, 1895, no. 2951 (Pl. xxvi); Hirsch xxx, Barron Sale, 1911, no. 591 (Pl. xviii).

120 DRACHM.

Obv. Similar to no. 110. *Rev.* Similar to no. 110. Below, | AΞP.

London, no. 40; Paris, no. 761; Petrograd, no. 433; Newell; Glasgow (Hunterian Coll.) no. 27.

121 DRACHM.

Obv. Similar. *Rev.* Similar. Below, | AΞP.

Paris, nos. 758 and 762; Petrograd, no. 432; Glasgow (Hunterian Coll.), no. 25; Yale Univ. Coll.

122 DRACHM.

Obv. Similar. *Rev.* Similar. Below, | AΞP.

London, no. 37, Plate VII, no. 38; Paris, nos. 763 and 764; Newell; Petrograd, no. 435; Glasgow (Hunterian Coll.), no. 26 (Pl. lxvii, 7).

2nd Issue.

123 TETRADRACHM.

Obv. Similar to no. 103. *Rev.* Similar to no. 103. On l., outside inscription, | MI. In exergue, AΞP.

London. no. 19.

124 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, |. In exergue, AΞP.

London, no. 20; Newell, Plate VI; Egger Sale xli, 1912, no. 691 (Pl. xix).

125 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, |. In exergue, AΞP.

Newell, Plate VI.

126 DRACHM.

Obv. Similar to no. 110. *Rev.* Similar to no. 110. Below, | AΞP.

Glasgow (Hunterian Coll.), no. 28; Paris, nos. 759 and 760; H. R. Drowne Coll.; Newell, Plate VII; Schulman, White-King Sale, no. 568 (Pl. vi); Yale Univ. Coll.

127 DRACHM.

Obv. Similar. *Rev.* Similar. Below, P. AΞP.

Newell, Plate VII.

e. Dated ΒΞΡ Oct. 151 to Spring 150.

128 GOLD TWO-AND-A-HALF STATER.

Obv. Goddess holding sceptre in r. and cornucopiae in l., seated on throne to l. Circle of dots. Beneath throne, ΒΛ (erased). On l., in field, ΒΛ.

Rev. ΒΑΣΙΛΕΩΣ ΔΗΜΗΤΡΙΟΥ (to r.) ΣΩΤΗΡΟΣ (to l.). Double cornucopiae adorned with taenia. On r., between inscription and design, ΒΞΡ. On l., between inscription and design, 𐡀 | ΣΑ.

Paris, no. 765, Plate VII.

129 GOLD DISTATER.

Obv. Similar to preceding. On l., in field, Β.

Rev. Similar. On r., between inscription and design, ΒΞΡ. On l., between inscription and design, 𐡀 | 𐡀.

Berlin (Zeitschrift für Numismatik, vol. VI, 1879, p. 2).

130 TETRADRACHM.

Obv. Similar to no. 102.

Rev. Similar to no. 102. On l., outside inscription, 𐡀 | 𐡀. In exergue, ΒΞΡ.

Egger Sale, Jan., 1908, no. 599, Plate VII; Paris, no. 767 ; Newell.

131 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, 𐡀 | 𐡌. In exergue, ΒΞΡ.

Paris, no. 766 ; (London, nos. 21 and 22 with uncertain monogram may go here).

132 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, 𐡀 | 𐡄. In exergue, ΒΞΡ.

Paris, no. 768 ; Glasgow (Hunterian Coll.), no. 21, (Pl. lxvii, 6).

133 DRACHM.

Obv. Similar to no. 109.

Rev. Similar to no. 109. Below, 𐡀 𐡌 | ΒΞΡ.

Jameson Coll., no. 1704 (Pl. lxxxvi).

134 DRACHM.

Obv. Similar.

Rev. Similar. Below, 𐡀 𐡄 | ΒΞΡ.

Paris, no. 769 ; Petrograd, no. 437.

Demetrius ruled his kingdom with a firm hand but, perhaps for that very reason, was never able to gain the affections of his subjects, and by his foreign policies he soon aroused the enmities of neighboring states. By 151 B. C. a coalition of Ptolemy VII of Egypt, Ariarathes

V of Cappadocia, and Attalus II of Pergamum was formed against Demetrius. For some years previous to this time the Pergamene king had been championing the claim to the Syrian throne of a certain Alexander, surnamed Balas, who gave himself out as the second son of Antiochus IV. This person was now assisted with an army by the allied kings and effected a landing at Ptolemais in Palestine. Demetrius evidently felt that with sedition at home, and three powerful kingdoms against him his chances of successful resistance were small. He therefore sent his two little sons, Demetrius and Antiochus, away into safety and with that part of the army that could still be relied upon he advanced against Alexander. In the battle that followed his army was overwhelmed and Demetrius himself perished, fighting bravely to the end. This event took place in the spring of 150 B. C.[22]

The third and last series of the Antiochene coinages of Demetrius is distinguished by bearing dates running from HNP to BΞP (158-162 Aer. Sel.); by a uniform coinage of tetradrachms and corresponding drachms; and by the fact that the minting of these pieces was under the constant supervision of one magistrate signing himself Φ, and assisted by three or more subordinates per year. Thus between October 155 and October 154 B. C. four subordinates were functioning Θ, Λ, Η, and ΜΙ. For the two years between October 154 and October 152 only the three magistrates Θ, Λ, Η, were active. The first issues of year ΑΞP (152-151 B. C.) were issued under Φ's supervision with the assistance of the same three Θ, Λ, Η who were later replaced by ΜΙ, Φ, and Ϟ. The following and last year of the coinage Φ, ⋔, and a new one ⋔ were active for the silver, Λ and ΣΑ for the special gold issues. This issue came to an end, naturally, with the death of Demetrius. The well known gold two-and-a-half stater piece (Paris, Pl. xvii, no. 1) was struck in Antioch along with the last issue of tetradrachms, as was also the corresponding gold double stater of the Berlin collection. These gold coins bear the monogram Φ, the letters ΣΑ or Λ and the date BΞP. The monograms show conclusively that these unusual pieces were struck at the same mint as our tetradrachms. Both Friedlaender (Zeit. für Num., vol. vi, 1872, pp. 2-7) and Babelon (Introd. cxx) have shown that these coins could not possibly have been struck in Cyprus as suggested by Lenormant (Revue numismatique, 1855, p. 89). Friedlaender, indeed, goes further, and on account of the monogram Λ, attributes the Berlin specimen to Antioch. We now see that both coins

[22] Bevan, *loc. cit.*, p. 211.

should be assigned to that mint. The immediate occasion for the issue of these curious denominations was probably the danger which threatened the rule of Demetrius in 150 B. C. and the consequent necessity for raising and equipping his army to meet it. Friedlaender is no doubt correct in assigning the unusual appearance of marks of value (Β and ΒΑ) found on these pieces to the confusion which might arise in distinguishing the two coins — both having similar types and the difference in weight being so slight as not to be easily discernible without recourse to the balance.

Both the British Museum and Paris catalogues have attributed the tetradrachms to various mints, e. g. those with the monogram ⍓ to Apamea, ΑΙ to Antioch, ΗΡ to Heraclea, etc. When all these pieces have been assembled, however, it is clearly seen that they must have emanated from one and the same mint. The use of common obverse dies between coins bearing different monograms; steady and uniform progression in style and fabric, year by year, throughout the entire series; the appearance on *all* the coins of the one monogram ⍓, and other minor points place the fact of a single mint for the coins of Series III beyond a doubt, and if of Series III, then too of Series I and II because they are definitely bound together by style and community of monograms. Of all the cities in the realms of Demetrius it was obviously only at Antioch, the metropolis and capital of the kingdom, that there could have been located the mint that issued such a large, yet compact and consecutive a series as the one here described. It is certainly the largest and most complete of all that monarch's coinages, and it is inconceivable that any other mint than Antioch could have issued it, and besides, by style and monograms it is closely bound to the preceding Antiochene issues of Antiochus IV and Antiochus V.

The bronze issues of Demetrius for Antioch are possibly to be found in the very common series of three types with serrated edges brought together by Dr. Macdonald in his catalogue of the Hunterian Collection, pp. 55 and 56, nos. 8 to 15. These coins, comprising three denominations (I, Head of Apollo, rev. Tripod; II, Head of Artemis, rev. Bow and quiver; III, Horse's head, rev. Elephant's head), are easily the commonest of all the bronze coins found to-day with the name of Demetrius. Hence it is most likely that they were struck at the principal mint, Antioch, and their style is certainly in favor of this attribution especially as we have noted that bronze coins with serrated edges were struck here under Seleucus IV and Antiochus IV. Dr.

Macdonald also calls our attention to a corresponding series of three denominations with the same types but with plain edges and of half the weight. These should be assigned to the same mint.

In addition to Antioch, Seleucia on the Tigris and Tyre were two very active mints under Demetrius, supplemented by small and intermittent issues at one or two other cities of the kingdom.

ALEXANDER I BALAS, 150-145 B. C.

Alexander, when he had once become king, seems to have surrendered himself to a life of ease and license. He spent most of his time in the southern portion of his dominions, particularly at Ake-Ptolemais or in Phoenicia.[23] It was perhaps due to this predilection that the mints of the Phoenician cities of Tyre, Sidon, and Berytos became so active under his rule. Never-the-less, the mint at Antioch lost little of its importance and continued to coin, if not quite so profusely as under Demetrius, still in sufficient quantities to make its coins fairly common to this day. As yet no coins of Alexander Balas have been published, of the series attributable to Antioch, bearing the date ΒΞΡ, the last year of Demetrius' reign and the one in which Antioch fell to the new ruler.

SERIES I (Dated issues).

a. Dated ΓΞΡ Oct. 150 to Oct. 149.

135 TETRADRACHM.

Obv. Diademed head of Alexander I to r. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΛΕΞΑΝΔΡΟΥ (to r.) ΘΕΟΠΑΤΟΡΟΣ | ΕΥΕΡΓΕΤΟΥ (to l.). Zeus, with chlamis draped over l. shoulder and legs, seated to l. on throne (which sometimes has back), holds wreath-bearing Nike in outstretched r., rests l. on sceptre. On l., outside inscription, CORNUCOPIAE. In exergue, ΓΞΡ 𐤌.

London, no. 8; Newell, Plate VII; Sotheby, Cumberland-Clark Sale, 1914, no. 273 (Pl. vii).

[23] Bevan, *loc. cit.*, p. 213, and note 3.

136 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, CORNUCOPIAE. In exergue, ΓΞP 𐡀.

Paris, no. 871.

137 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, CORNUCOPIAE, Θ. In exergue, ΓΞP.

Newell (same obverse die as no. 135 Newell).

138 DRACHM.

Obv. Head of Alexander I diademed to r. in dotted circle.

Rev. ΒΑΣΙΛΕΩΣ | ΑΛΕΞΑΝΔΡΟΥ (to r.) ΘΕΟΠΑΤΟΡΟΣ ΕΥΕΡΓΕΤΟΥ (to l.). Apollo seated to l. on omphalos, holds arrow in outstretched r., rests l. on bow. On l., outside inscription, CORNUCOPIAE. In exergue, ΓΞP.

London, no. 17 (Pl. xvi, 2); Paris, no. 874; Petrograd, no. 483.

139 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, CORNUCOPIAE. In exergue, ΓΞP 𐡀.

Jameson Coll., no. 1713 (Pl. lxxxvi).

140 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, CORNUCOPIAE and 𐡈. In exergue, ΓΞP.

Paris, no. 873; Petrograd, no. 485.

141 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, CORNUCOPIAE and E. In exergue, ΓΞP.

Paris, no. 872.

b. Dated ΔΞP Oct. 149 to Oct. 148.

142 TETRADRACHM.

Obv. Similar to no. 135.

Rev. Similar to no. 135. On l., between figure and inscription, 𐡀. On l., outside inscription, ΠP. In exergue, ΔΞP.

Newell, Plate VII; London, no. 11; Paris, no. 876; Hirsch, Rhousopoulos Sale, no. 4455 (Pl. lvi).

143 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, 𐤀. On l., outside inscription, 𐤁. In exergue, ΔΞP.

London, no. 10.

144 TETRADRACHM.

Obv. Similar.

Rev Similar.. On l., between figure and inscription, 𐤀. On l., outside inscription, 𐤂. In exergue, ΔΞP.

Roll. & Feuard. Sale, June 9th, 1913, no. 331 (Pl. xi).

145 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, 𐤀. In exergue, ΔΞP, 𐤁.

Glasgow (Hunterian Coll.), no. 2.

146 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, 𐤀. In exergue, ΔΞP, 𐤂.

London, no. 9.

147 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, 𐤀. In exergue, ΔΞP, 𐤃P.

Paris, no. 875 (Pl. xviii, 4).

148 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, 𐤀. In exergue, ΔΞP, 𐤄.

Egger Sale xlv, 1913, no. 685 (Pl. xix).

149 DRACHM.

Obv. Similar to no. 138.

Rev. Similar to no. 138. In exergue, ΔΞP.

London, no. 18.

SPECIAL ISSUE FOR THIS YEAR.

150 TETRADRACHM.

Obv. Head of Alexander I diademed to r. in fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΛΕΞΑΝΔΡΟΥ (to r.) ΘΕΟΠΑΤΟΡΟΣ ΕΥΕΡΓΕΤΟΥ (to l.). Athene, helmeted and draped, standing to l., holds wreath-bearing Nike in outstretched r., rests l. on spear and shield. On l., between figure and inscription, 𐤀 𐤃P. In exergue, ΔΞP.

London, no. 15, **Plate VII.**

c. Dated ΕΞΡ Oct. 148–Oct. 147.

151 TETRADRACHM.
Obv. Similar to no. 135.

Rev. Similar to no. 135. On l., between figure and inscription, ☙. In exergue, ΕΞΡ, ΠΡ.

Newell, Plate VII.

152 TETRADRACHM.
Obv. Similar.

Rev. Similar. On l., between figure and inscription, ☙. In exergue, ΕΞΡ, ΠΡ.

Petrograd, no. 487.

153 TETRADRACHM.
Obv. Similar.

Rev. Similar. On l., between figure and inscription, ☙. In exergue, ΕΞΡ, ⌓.

Paris, no. 877.

154 TETRADRACHM.
Obv. Similar.

Rev. Similar. On l., between figure and inscription, CORNUCOPIAE. In exergue, ΕΞΡ, ⊢.

Paris, no. 879.

155 TETRADRACHM.
Obv. Similar.

Rev. Similar. On l., between figure and inscription, ⏃. In exergue, ΕΞΡ, ⋈.

Paris, no. 878.

156 TETRADRACHM.
Obv. Similar.

Rev. Similar. On l., between figure and inscription, ⋊. In exergue, ΕΞΡ, Σ.

Petrograd, no. 488.

d. Dated ϹΞΡ Oct. 147–Oct. 146.

157 TETRADRACHM.
Obv. Similar.

Rev. Similar. On l., between figure and inscription, ⋊. In exergue, ϹΞΡ, Ζ.

Egger Sale xli, 1912, no. 697, Plate VII, perhaps also Egger Sale, Jan., 1908, no. 603 (Pl. xviii), monogram in exergue incomplete.

158 TETRADRACHM.
Obv. Similar.

Rev. Similar. (Throne has eagle decoration on leg.) On l., between figure and inscription, ⋊. In exergue, ϹΞΡ, Θ.

Paris, no. 881, Plate VII.

159 TETRADRACHM.

Obv. Similar.

Rev. Similar. (Throne has plain leg.) On l., between figure and inscription, 𐤀. In exergue, ΣΞΡ, Θ.

Newell, Plate VII.

160 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, 𐤀. In exergue, ΣΞΡ, 𐤋.

Coll. L. Walcher de Molthein, 1895, no. 2966 (Pl. xxvi).

161 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, 𐤀. In exergue, ΣΞΡ and 𐤓.

Glasgow (Hunterian Coll.), no. 3.

e. Dated ΙΞΡ after Oct. 146.

162 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, 𐤋. In exergue, ΙΞΡ and uncertain monogram.

London, no. 12.

The coin catalogued under no. 882 in the Paris catalogue has not been incorporated here as it has not been seen and seems to vary from any of the preceding coins in having a monogram under the throne. It may or it may not have been struck at Antioch.

SERIES II (Undated Issues).

163 GOLD STATER.

Obv. Diademed head of Alexander I to r. in circle of dots.

Rev. ΒΑΣΙΛΕΩΣ | ΑΛΕΞΑΝΔΡΟΥ (to r.) ΘΕΟΠΑΤΟΡΟΣ | ΕΥΕΡΓΕΤΟΥ (to l.). Zeus seated as on tetradrachm no. 135.

Paris, no. 793 (Pl. xvii, 9).

164 TETRADRACHM.

Obv. Similar to no. 135.

Rev. Similar to no 135. In exergue, ΠΡΟ.

Egger, Prowe Sale, 1904, no. 1546 (Pl. x).

165 TETRADRACHM.

Obv. Similar.

Rev. Similar. (Throne leg sometimes decorated with eagle.) In exergue, 𐤐.

Newell, Plate VIII; Paris, no. 797; Petrograd, nos. 448 and 449.

166 TETRADRACHM.

Obv. Similar. *Rev.* Similar. (Throne leg sometimes decorated with eagle.) In exergue, ⊾.

Sotheby, Bunbury Sale, no. 505 (Pl. v); Paris, no. 795 (Pl. xvii, 10); Yale Univ. Coll.

167 TETRADRACHM.

Obv. Similar. *Rev.* Similar. In exergue, ⊢Ρ.

J. Ward Coll., no. 789 (Pl. xix); Sotheby, O'Hagan Sale, 1908, no. 669 (Pl. xi).

168 TETRADRACHM.

Obv. Similar. *Rev.* Similar. In exergue, ΓΡ.

Jameson Coll., no. 1707 (Pl. lxxxvi).

169 TETRADRACHM.

Obv. Similar. *Rev.* Similar. In exergue, ⅄.

Petrograd, no. 445 (has not been seen, but possibly belongs to our series).

170 TETRADRACHM.

Obv. Similar. *Rev.* Similar. In exergue, Δ.

Egger Sale, Jan., 1908, no. 602, Plate VIII.

171 TETRADRACHM.

Obv. Similar. *Rev.* Similar. In exergue, Μ.

Warren Coll., no. 1302 (Pl. xxx).

171a TETRADRACHM.

Obv. Similar. *Rev.* Similar. In exergue, Σ.

Yale Univ. Coll.

171b TETRADRACHM.

Obv. Similar. *Rev.* Similar. In exergue, Σ.

H. R. Browne Coll.

Undated Drachms contemporary with tetradrachms of years ΔΞΡ — ΖΞΡ.

Series A (with ⅄).

172 DRACHM.

Obv. Similar to no. 138. *Rev.* Similar to no. 138. On l., outside inscription, ⅄. In exergue, ⌧.

Glasgow (Hunterian Coll.), no. 10; London, no. 25; Petrograd, no. 453.

173 DRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, ⅄. In exergue, ⊾.

London, no. 26; H. R. Browne Coll.

174 DRACHM.

Obv. Similar. *Rev* Similar. On l., outside inscription, Ϡ. In exergue, ⌓.

London, no. 24.

175 DRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, Ϡ. In exergue, Θ.

Egger Sale xlv, 1913, no. 758, Plate VII; Petrograd, no. 462.

Series B (with ⌓).

176 DRACHM.

Obv. Similar. *Rev.* Similar. In exergue, ⌓.

Newell, Plate VII; Paris, no. 802; Petrograd, no. 458; Yale Univ. Coll.; Glasgow (Hunterian Coll.), no. 6.

177 DRACHM.

Obv. Similar. *Rev.* Similar. In exergue, ⌓ ⊢.

Paris, no. 806.

Series C (with ⋈).

178 DRACHM.

Obv. Similar. *Rev.* Similar. In exergue, ⋈.

Newell; Paris, no. 796.

179 DRACHM.

Obv. Similar. *Rev.* Similar. In exergue, ⋈ ⊢.

Glasgow (Hunterian Coll.), no. 12.

180 DRACHM.

Obv. Similar. *Rev.* Similar. In exergue, ⋈ Θ.

Amer. Num. Soc.

181 DRACHM.

Obv. Similar. *Rev.* Similar. In exergue, ⋈ Σ.

Petrograd, no. 447.

Series D (with ⏢).[24]

182 DRACHM.

Obv. Similar. *Rev.* Similar. In exergue, ⏢ Θ.

Glasgow (Hunterian Coll.), no. 8.

[24] Because of minuteness this monogram on the drachms often has the form △.

183 DRACHM.

Obv. Similar. *Rev.* Similar. In exergue, ⏢ A.

Glasgow (Hunterian Coll.), no. 5.

184 DRACHM.

Obv. Similar. *Rev.* Similar. In exergue, ⏢ Ϟ.

Newell.

Series E (Miscellaneous monograms).

185 DRACHM.

Obv. Similar. *Rev.* Similar. In exergue, Κ ΚΑΡ.

Newell.

186 DRACHM.

Obv. Similar. *Rev.* Similar. In exergue, Θ.

London, nos. 21 and 22; Paris, no. 805.

187 DRACHM.

Obv. Similar. *Rev.* Similar. In exergue, ΠΡ.

Paris, no. 803; Petrograd, no. 459.

188 DRACHM.

Obv. Similar. *Rev.* Similar. In exergue, Δ.

London, nos. 19 and 20. (Here too Paris, no. 804?)

189 HEMIDRACHM.

Obv. Diademed and radiate head of Alexander I to r. in circle of pearls.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ΑΛΕΞΑΝΔΡΟΥ (to l.). Apollo standing to l. holding arrow in outstretched r., rests l. on bow. On l., outside inscription, CORNUCOPIAE.

Glasgow (Hunterian Coll.), no. 18 (Pl. lxvii, 11).

190 HEMIDRACHM.

Obv. Similar. *Rev.* Similar. On l., between figure and inscription, ⏢.

London, no. 29 (inscription reads ΑΛΕΞΑΤΟΡΟΣ).

191 HEMIDRACHM.

Obv. Similar. *Rev.* Similar. On l., between figure and inscription, ⏢.

Glasgow (Hunterian Coll.), no. 17.

192 HEMIDRACHM.

Obv. Similar. *Rev.* Similar. On l., between figure and inscription, Φ.

London, no. 30, Plate VII; Paris, no. 808 (Pl. xvii, 12); Petrograd, no. 464.

193 HEMIDRACHM.

Obv. Similar. *Rev.* Similar. No symbol or monograms.

Paris, no. 807 ; London, no. 28 ; Petrograd, no. 463.

194 DIOBOL.

Obv. Diademed head of Alexander to r. in circle of dots. *Rev.* ΒΑΣΙΛΕΩΣ (to r.) ΑΛΕΞΑΝΔΡΟΥ (to l.). Tripod.

Paris, no. 809 (Pl. xvii, 13).

The two magistrates 𐤀 and 𐤌 were carried over from Demetrius' issues of the year ΒΞΡ, to Alexander's of the year ΓΞΡ. Although Alexander substituted the figure of Zeus Olympios (the old type of his alleged father Antiochus IV, and his brother Antiochus V) for the seated Tyche of Demetrius, and the fillet border for the laurel wreath border, the style and general appearance of the two coinages at Antioch remain the same. For the year ΓΞΡ the superintendent of the mint signs himself CORNUCOPIAE. In the following year this superintendent drops out (or perhaps he simply changes his signature), and the monogram 𐤊 takes the place of the CORNUCOPIAE symbol, while the subordinates remain the same, with one or two added. There is also a special issue of tetradrachms for this year with the reverse type of a standing Athene. The reason for this sudden innovation is obscure ; though, as we know from his other coin types (e. g. Brit. Mus. Cat., Pl. xvi, nos. 10 and 11) Alexander Balas was very partial to his namesake the great Alexander, and so perhaps desired to honor upon his coins the third of the divinities so particularly favored by the Macedonian. As on the coins of Alexander the Great, Athene, Zeus, and Herakles form the choice of types, so this Alexander placed these same three divinities upon his issues. The coinage of tetradrachms continues plentifully for the years ΕΞΡ and ΣΞΡ, while that of the dated drachms is superceded by an undated series. Many of the subordinate officials remain the same for these issues, but the two new superintendents 𐤁 and 𐤊 replace the previous ones. In the year ΖΞΡ the coinage of Alexander Balas is interrupted by his flight from the capital, and the accession of Demetrius II. Only one or two specimens are in existence of his Antiochene issues for this year, which leads one to infer that Alexander fled not many months after October 146 B. C.

Alongside of the dated series of tetradrachms there occurs also an undated series, our nos. 164 to 171. That they belong to our mint is made certain by similarity of style and especially by the fact that sev-

eral magistrates of the dated series also signed many of these pieces. It would seem that the entire coinage of these undated pieces occurred at one time, as the style of all is identical and several specimens of nos. 164, 165, 166, and 170 have their obverses from a single die.

As noted above, the coinage of *dated* drachms ceases in the year ΔΞΡ, but their place is taken for this and the succeeding years by the undated drachms collected under nos. 172 to 188. On these the same letters and monograms are displayed as on the accompanying tetradrachms, while their style agrees with the issues actually dated ΔΞΡ to ΖΞΡ.

Aside from the purely municipal bronze issues of Antioch (London, no. 63, Glasgow, nos. 65, 66, Paris, nos. 909-911) there were royal issues as well at this mint. Among these are some[25] of those with type Alexander (or Herakles) in lion's skin, reverse standing Apollo and symbols: CORNUCOPIAE, TRIDENT, STAR and with monograms met with on the silver coins. There certainly is a large series of serrated bronze coins, consisting of two denominations, which belong to Antioch. These are to be found brought together by Dr. Macdonald in his catalogue of the Hunterian Collection, pp. 64, 65, nos. 48-59. These pieces have monograms met with on the silver, and are a direct continuation of the serrated bronzes already noticed as having been struck at Antioch under Demetrius I.

DEMETRIUS II NICATOR.

First reign in Antioch[26] 146-144 B. C.

As early as the year 147 B. C., Ptolemy VII Philometor of Egypt, who had materially assisted in placing Alexander Balas upon the Syrian throne, became dissatisfied with the course of events then taking place in the neighboring kingdom. Rebellions and local disturbances at home due to the negligence and incapacity of Alexander, threatened invasions from abroad by rival claimants to the throne, all made Ptolemy's influence in Syria uncertain. With a strong army he advanced to Ptolemais whence Alexander, but a short time previously, had departed for Antioch to quell an incipient revolt and to meet an invasion from the North of the young Demetrius, the eldest of Demetrius Soter's

[25] Those with symbol PALM BRANCH would seem to belong to another mint, probably Apamea.

[26] Demetrius ruled till 138 B. C. in Phoenicia.

sons. Ptolemy evidently felt that Alexander had now reigned long enough for Egyptian interests and, having advanced as far as Seleucia on the Orontes, found occasion to break openly with him. He proclaimed the little Demetrius (a child of some fourteen years of age) king in the place of Alexander. Antioch revolted and Alexander fled to the hills (shortly after Oct. 146 B. C. as shown by his Antiochene coins). Ptolemy thereupon entered Antioch and placed his young protégé upon the Seleucid throne as Demetrius II Theus Philadelphus Nicator. The following year (B. C. 145) Alexander made one more bid for his kingdom and with a hastily assembled army crossed the Amanus mountains into the plain of Antioch. Here a pitched battle was fought, just outside the walls of the city, Alexander was overwhelmed, managed to escape to the hills, but was assassinated by an Arab chieftain and his head sent to Ptolemy. Ptolemy, however, had also fallen in battle with a mortal wound, of which he died shortly after, leaving the little Demetrius Seleucid king without either friend or rival. But not for long. The Cretan condottieri and soldiers of fortune who formed Demetrius' principal stand-by and the most dependable part of his army now took things into their own hands and commenced to plunder the country mercilessly. An attempt was made to disband the national army in order that the strangers might be the more secure. This led to a terrible revolt in Antioch which was only suppressed after thousands had been slaughtered, a large portion of the city burned, and the remainder given up to plunder and rapine. At this time a more successful revolt also broke out at Apamea, the military arsenal of the kingdom, under a certain Diodotus who later became known as Tryphon. He secured the allegiance of the native soldiery in the name of the little Antiochus whom his father Alexander had placed in safety with an Arabian chief before his defeat by Ptolemy Philometor. In the 168th year of the Seleucid Era (144 B. C.) Antioch opened its gates joyfully to Antiochus VI Theus Epiphanes Dionysus, while Demetrius retreated to the cities of the Phoenician coast where he continued to rule for another six years.

The mint of Antioch, taken over bodily by the young Demetrius from his predecessor, commenced operations at once — if we may judge by the style of the first issues and the reappearance on them of nearly all the monograms belonging to those subordinate officials who were active under Alexander.

The following, then, are the coins struck by Demetrius during the two years of his disastrous reign in Antioch.

Dated ΖΙΡ, end of 146 or early in 145–Oct. 145.

a. With monogram ⋔.

195 TETRADRACHM.

Obv. Diademed head of Demetrius II to r. in fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΔΗΜΗΤΡΙΟΥ (to r.) ΘΕΟΥ | ΦΙΛΑΔΕΛΦΟΥ | ΝΙΚΑΤΟΡΟΣ (to l.). Apollo naked seated to l. on omphalos, holding arrow in outstretched r., rests l. on bow. On l., between figure and inscription, ⋔. In exergue, ΖΙΡ ⊬.

Paris, no. 950.

196 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, ⋔. In exergue, ΖΙΡ ⊢.

Paris, no. 951.

197 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription ⋔. In exergue, ΖΙΡ Θ.

London, no. 10.

198 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, ⋔. In exergue, ΖΙΡ ⌓.

London, no. 9, Plate VIII; another, no. 8.

199 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, ⋔. In exergue, ΖΙΡ ⊀.

Jameson Coll., no. 1716 (Pl. lxxxvi).

200 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, ⋔. In exergue, ΖΙΡ ⋉.

Cast in author's possession, present whereabouts of original unknown.

b. With ⌧ and PALM BRANCH.

201 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, PALM BRANCH. On l., between figure and inscription, ⌧. In exergue, ΖΙΡ ⌓.

Sotheby, Bunbury Coll., no. 524, Plate VIII.

202 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, PALM BRANCH. On l., between figure and inscription, 𐤀. In exergue, ZΞP 𐤓.

Newell, Plate VIII.

203 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, PALM BRANCH. On l., between figure and inscription, 𐤀. In exergue, ZΞP 𐤀𐤐.

Newell.

204 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, PALM BRANCH. On l., between figure and inscription, 𐤀. In exergue, ZΞP 𐤀.

Paris, no. 952.

205 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, PALM BRANCH. On l., between figure and inscription, 𐤀. In exergue, ZΞP 𐤐.[27]

Petrograd, no. 500.

206 TETRADRACHM.

Obv. Similar, but with laurel wreath border.

Rev. Similar. On l., outside inscription, PALM BRANCH. On l., between figure and inscription, 𐤀. Between feet of Apollo, 𐤎. In exergue, ZΞP.

Paris, no. 954, Plate VIII.

Dated HΞP, Oct. 145–early in 144.

207 TETRADRACHM.

Obv. Similar, with head in laurel wreath border.

Rev. Similar. On l., outside inscription, PALM BRANCH. On l., between figure and inscription, 𐤀. Between feet of Apollo, K. In exergue, HΞP.

Petrograd, no. 499.

[27] Not having seen this piece or Petrograd, no. 501, I would be inclined to question the exact form of the monograms there recorded.

208 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, PALM BRANCH. On l., between figure and inscription, 𐡀. Between feet of Apollo, 𐡀. In exergue, HΞP.

Newell,[28] Plate VIII; London, no. 11 (which, however, is said to possess a fillet border); Hirsch, Rhousopoulos Sale, no. 4458 (Pl. lvi); Sotheby, O'Hagan Sale, 1908, no. 672 (Pl. xi).

209 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, PALM BRANCH.[29] On l., between figure and inscription, 𐡀. Between feet of Apollo, H. In exergue, HΞP.

Glasgow (Hunterian Coll.), no. 3 (Pl. lxvii, 18).

209a TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, PALM BRANCH. On l., between figure and inscription, 𐡀. Between feet of Apollo, 𐡀. In exergue, HΞP.

Imhoof-Blumer, *Monnaies Grecques*, 1883, p. 434, no. 103.

210 DRACHM.

Obv. Diademed head of Demetrius II to r. in dotted circle.

Rev. ΒΑΣΙΛΕΩΣ | ΔΗΜΗΤΡΙΟΥ (to r.) ΘΕΟΥ | ΦΙΛΑΔΕΛΦΟΥ | ΝΙΚΑΤΟΡΟΣ (to l.). Apollo as above. On l., between figure and inscription, 𐡀. Between feet of Apollo, ⊢⊀. In exergue, HΞP (?).[30]

Paris, no. 953.

211 DRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, 𐡀. Between feet of Apollo, 𐡀. In exergue, HΞP.

London, no. 12; Egger Sale xli, 1912, no. 708, Plate VIII.

212 DRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, 𐡀. Between feet of Apollo, K. In exergue, HΞP.

Jameson Coll., no. 1723 (Pl. lxxxvii), Plate VIII.

[28] The reverse design having been struck a little to one side it is impossible to determine if the PALM BRANCH was originally on this die or not. Its presence, though, is probable.

[29] The stem of the PALM BRANCH is just visible.

[30] The date is obscure. Babelon suggests ZΞP, but as all the other known drachms are HΞP it has been placed here until another specimen turns up.

213 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, STAR. On l., between figure and inscription, 𐡀. Between feet, 𐡀.

Newell; London, no. 13; perhaps also Glasgow (Hunterian Coll.), no. 5.

214 DRACHM.

Obv. Similar, but with fillet border.

Rev. Similar. On l., between figure and inscription, 𐡀. Between feet of Apollo, 𐡀. In exergue, ΗΞΡ.

Glasgow (Hunterian Coll.), no. 4.

215 HEMIDRACHM.

Obv. Diademed head of Demetrius II to r. in dotted circle.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ΔΗΜΗΤΡΙΟΥ (to l.). Apollo, naked, standing to l., holding arrow in outstretched r., rests l. on bow. In front of figure, 𐡀 | 𐡇.

Egger Sale xli, 1912, no. 709, Plate VIII.

The first issue of Demetrius upon his arrival in Antioch consists of the tetradrachms nos. 195 to 200. The supreme magistrate is now 𐡌, but the subordinate ones we have all met with on the previous issues of Alexander Balas, showing conclusively that we here have to do with the issues of one and the same mint. The last date borne by the coins of Alexander was ΖΞΡ which began in October 146 B. C. As we possess only one certain specimen of this coinage it must have been very small. Demetrius' issues for Antioch begin with the same date, that is ΖΞΡ, but are very numerous. It is probable, therefore, that Alexander's flight before the threatening advance of Ptolemy Philometor and the insubordination of his own subjects in Antioch occurred towards the end of 146 B. C. It was not long, however, before Alexander was able to raise an army, whereupon, probably during the summer campaigning months, he approached Antioch only to meet defeat in pitched battle before the walls of the city. I would therefore assign the "a" series with the monogram 𐡌 to the interval between the flight of Alexander and his return in the early summer of 145 B. C. Series "b" was issued after the great victory of Ptolemy and Demetrius his protégé and bears in the field of the reverse a large palm branch (significant of this success) *in addition to* the monograms of the officiating magistrates. The chief official is now 𐡀, his subordinates consisting of some of our old friends together with a few new ones. To emphasize the victory, Demetrius, just before the close of the year ΖΞΡ, sub-

stitutes a laurel wreath for the more usual fillet border which he had placed on the obverse of his tetradrachms at the beginning of his reign (see Plate VIII, no. 206 and following).

The issues of year ΗΞΡ continue as in the previous year with ΦΙ as chief magistrate. This year is signalized by a plenteous issue of drachms and also a hemidrachm (no. 215). The majority of the subordinate officials have been met with before.



fig. 5



fig. 6



fig. 7

The bronze issues of Demetrius for Antioch are somewhat obscure, among them however is certainly a series of three denominations as illustrated in the accompanying cuts. All the varieties of this issue that I have been able to study show in the exergue the monogram ΜΑ which is likewise found on series "a" of the tetradrachms. The bronze coins are therefore contemporary with these tetradrachms.

ANTIOCHUS VI DIONYSUS, In Antioch, 144-142 B. C.

It has already been related above how the native soldiery, at the instigation of a certain Diodotus whom we know better under the name Tryphon, revolted against the little Demetrius and declared for Antiochus, the infant child of Alexander Balas. The revolt originated at Apamea[31] but soon spread to Antioch, Demetrius fled to Seleucia, and in the course of the 168th year of the Seleucid Era, Antiochus with his protector Tryphon entered the capital in triumph. He, however, was unable to secure the cities of the Phoenician coast which remained loyal to Demetrius throughout the remainder of that monarch's first reign.

These events must have occurred early in the summer of 144 B. C. for the issues of Antiochus VI, following closely upon those of Demetrius for the same year, are far from rare.

[31] It was here that were struck the rare tetradrachms, Paris, pl. xx, 6, and Egger Sale xli, 1912, no. 712.

Dated ΗΞΡ, Summer of 144–October 144.

216 TETRADRACHM.

Obv. Diademed and radiate head of Antiochus VI to r. in fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (above) ΕΠΙΦΑΝΟΥΣ | ΔΙΟΝΥΣΟΥ (below). The Dioscuri, with couched spears, flying mantles, and star-adorned caps, galloping to l., the whole in wreath composed of lotus, ivy, and wheat ears. Behind riders, ΤΡΥ. Beneath horses, ΗΞΡ.

London, no. 1, Plate VIII.

217 TETRADRACHM.

Obv. Similar, but ends of diadem are flying.

Rev. Similar. Behind riders, ΤΡΥ | ΚΡ. Beneath horses, ΗΞΡ.

Egger Sale xlv, no. 762, Plate VIII.

218 TETRADRACHM.

Obv. Similar.

Rev. Similar. Behind riders, ΤΡΥ | ⊓. Beneath horses, ΗΞΡ.

London (see Num. Chron., Ser. III, Vol. xx, 1900, Pl. xiv, 11).

219 TETRADRACHM.

Obv. Similar.

Rev. Similar. Behind riders, ΤΡΥ | ♋. Beneath horses, ΗΞΡ.

Sotheby, Carfrae Sale, 1894, no. 314 (Pl. x, 9).

220 TETRADRACHM.

Obv. Similar.

Rev. Similar, but with thyrsos in front of Dioscuri. Behind riders, ΤΡΥ | Κ. Beneath horses, ΗΞΡ.

Paris, no. 988 (Pl. xx, 7); Hirsch xxx, Barron Sale, 1911, no. 596 (Pl. xviii).

221 TETRADRACHM.

Obv. Similar, star behind head.

Rev. Similar, with thyrsos. Behind riders, ΤΡΥ | ✕. Beneath horses, ΗΞΡ.

Hirsch, Hoskier Sale, 1907, no. 441 (Pl. xv); Sotheby, Guzman Sale, 1914, no. 114 (Pl. vi).

222 DRACHM.

Obv. Diademed and radiate head of Antiochus VI to r. in circle of dots.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΕΠΙΦΑΝΟΥΣ | ΔΙΟΝΥΣΟΥ (to l.). Apollo, naked but for chlamis draped over r. thigh, seated to l. on omphalos holds arrow in outstretched r., l. rests on bow. On l., outside inscription, BUNCH OF GRAPES. Between feet of Apollo, Κ. In exergue, ΗΞΡ.

J. Ward Coll., no. 793, Plate IX; Glasgow (Hunterian Coll.), no. 3; E. Rogers, Num. Chron., Ser. IV, vol. xii, p. 253, no 21 (Pl. x, 9).

223 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, BUNCH OF GRAPES. Between feet of Apollo, Ⓐ. In exergue, ΗΞΡ.

Newell.

224 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, BUNCH OF GRAPES. Between feet of Apollo, ☓. In exergue, ΗΞΡ.

Newell.

225 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, BUNCH OF GRAPES. Between feet of Apollo, ⋔. In exergue, ΗΞΡ.

Egger Sale xlv, 1913, no. 695 (Pl. xix).

226 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, BUNCH OF GRAPES. Between feet of Apollo, ⋔. In exergue, ΗΞΡ.

Glasgow (Hunterian Coll.), no. 4.

227 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, BUNCH OF GRAPES. Between feet of Apollo, ⋔. In exergue, ΗΞΡ.

London, no. 7 ; Glasgow (Hunterian Coll.), no. 5.

Dated ΘΞΡ, Oct. 144–Oct. 143.

228 TETRADRACHM.

Obv. Similar to no. 221, with star behind head.

Rev. Similar to no. 220, with thyrsos. Behind riders, ΤΡΥ | ΙΤΤ | ⋔. Beneath horses, ΘΞΡ.

Newell, Plate VIII (same obverse die as no. 221).

229 TETRADRACHM.

Obv. Similar, but no star.

Rev. Similar, but no thyrsos. Behind riders, ΤΡΥ | ⋔ | ΣΤΑ. Beneath horses, ΘΞΡ.

London, no. 4 ; Paris, nos. 989, 990, and 991.

230 TETRADRACHM.

Obv. Similar to preceding.

Rev. Similar to preceding. Behind riders, TPY | ⊻ or ⊻ | ΣTA. Beneath horses, ΘΞP.

Hirsch, Rhousopoulos Sale, no. 4459 (Pl. lv); Sotheby, Bunbury Sale (II), no. 531 (Pl. v); Ratto Sale, 1909, no. 4878 (Pl. xix); Hirsch xvi, 1906, no. 678 (Pl. xix).

231 TETRADRACHM.

Obv. Similar.

Rev. Similar. Behind riders, TPY | ⍓ | ΣTA. Beneath horses, ΘΞP.

Egger Sale xlv, no. 694 (Pl. xix); Hoffmann Sale, 1898, no. 717 (Pl. iv).

232 TETRADRACHM.

Obv. Similar.

Rev. Similar. Behind riders, TPY | Φ | ΣTA. Beneath horses, ΘΞP.

London, nos. 2 and 3, **Plate VIII**; Hirsch Sale xxxii, 1912, no. 582 (Pl. xxii) from same obverse die as no. 231.

233 TETRADRACHM.

Obv. Similar.

Rev. Similar. Behind riders, TPY | ⍓ | ΣTA. Beneath horses, ΘΞP.

Egger Sale xlvi, 1914, no. 2458 (Pl. xxxix) formerly Ratto Sale, 1912, no. 1087; Hirsch Sale xxxi, 1912, no. 486 (Pl. xiii); Sotheby, Butler Sale, no. 262 (Pl. vi).

234 TETRADRACHM.

Obv. Similar.

Rev. Similar. Behind riders, TPY | ⍓ | ΣTA. Beneath horses, ΘΞP.

Petrograd, no. 509.

235 DRACHM.

Obv. Similar to no. 222.

Rev. Similar to no. 222. On l., outside inscription, BUNCH OF GRAPES. In exergue, ΘΞP ΣTA.

London, no. 8.

236 DRACHM.

Obv. Similar.

Rev. Similar. Between feet of Apollo, ⍓. In exergue, ΘΞP ΣTA.

Newell; Paris, nos. 992 and 993; Hirsch, Hoskier Sale, no. 442 (Pl. xv).

237 DRACHM.

Obv. Similar.

Rev. Similar. Between feet of Apollo, ⊻. In exergue, ΘΞP ΣTA.

London, no. 9; Glasgow (Hunterian Coll.), no. 6.

238 DRACHM.

Obv. Similar. *Rev.* Similar. Between feet of Apollo, 𐤀. In exergue, ΘΞP ΣTA.

Petrograd, no. 512; Glasgow (Hunterian Coll.), no. 7.

239 DRACHM.

Obv. Similar. *Rev.* Similar. Between feet of Apollo, 𐤀. In exergue, ΘΞP ΣTA.

London, no. 10.

Dated OP, Oct. 143–Oct. 142.

240 TETRADRACHM.

Obv. Similar to no. 229. *Rev.* Similar to no. 229. Behind riders, TPY | 𐤌 | ΣTA. Beneath horses, OP.

London, no. 5; J. Ward Coll., no. 749 (Pl. xx); Paris, no. 996; Sotheby, Cumberland-Clark Sale, 1914, no. 276 (Pl. viii).

241 TETRADRACHM.

Obv. Similar. *Rev.* Similar. Behind riders, TPY | 𐤏 | ΣTA. Beneath horses, OP.

Paris, no. 995; Hirsch Sale xxix, no. 824 (Pl. xii); Glasgow (Hunterian Coll.), no. 1 (Pl. lxviii, 2).

242 TETRADRACHM.

Obv. Similar. *Rev.* Similar. Behind riders, TPY | 𐤎 | ΣTA. Beneath horses, OP.

Paris, no. 994; Petrograd, no. 513; Egger Sale, Nov., 1909, no. 423 (Pl. xv).

243 TETRADRACHM.

Obv. Similar. *Rev.* Similar. Behind riders, TPY | 𐤎 (ΣTA omitted). Beneath horses, OP.

Egger Sale xlv, 1913, no. 763, Plate IX; Hirsch xi, 1904, no. 447 (Pl. ix).

244 TETRADRACHM.

Obv. Similar. *Rev.* Similar. Behind riders, TPY | Φ | ΣTA. Beneath horses, OP.

London, no. 6, Plate IX; Newell (formerly Egger Sale, Jan., 1908, no. 611, Pl. xix); Schulman, White-King Sale, no. 587 (Pl. vi); Egger Sale, Jan., 1908, no. 610 (Pl. xix).

245 TETRADRACHM.

Obv. Similar. *Rev.* Similar. Behind riders, TPY | 𐤀 | ΣTA. Beneath horses, OP.

Jameson Coll., no. 1725 (Pl. lxxxvii); Sotheby, Whitehead Coll., 1898, no. 14 (Pl. i); Egger Sale, 1914, no. 2459 (Pl. xxxix); Berlin Duplicates, Hess, 1907, no. 1187 (Pl. iv).

246 DRACHM.

Obv. Similar to no. 222.

Rev. Similar to no. 222. Between feet of Apollo, ⊓. In exergue, OP ΣTA.

London, no. 13; Petrograd, no. 516.

247 DRACHM.

Obv. Similar.

Rev. Similar. Between feet of Apollo, ⊢⊓ or ⊬⊓. In exergue, OP ΣTA.

Coll. L. Walcher de Molthein, no. 3003 (Pl. xxvii); Glasgow (Hunterian Coll.), nos. 9, 10, and 11; Santa Maria, Hartwig Sale, 1910, no. 820 (Pl. xv).

248 DRACHM.

Obv. Similar.

Rev. Similar. Between feet of Apollo, ⊻ or ⊻. In exergue, OP ΣTA.

London, no. 11, Plate IX; Newell; Paris, no. 997 (Pl. xx, 8); Petrograd, no. 514; Hirsch Sale xiv, 1905, no. 571 (Pl. xiv); Sotheby, Headlam Sale, May, 1916, no. 447 (Pl. x).

249 DRACHM.

Obv. Similar.

Rev. Similar. Between feet of Apollo, Φ. In exergue, OP ΣTA.

London, no. 12; Hirsch, Rhousopoulos Sale, no. 4460 (Pl. lv).

250 DRACHM.

Obv. Similar.

Rev. Similar. Between feet of Apollo, ⍋. In exergue, OP ΣTA.

Newell; Paris, nos. 998, 999, and 1000; Jameson Coll., no. 1726 (Pl. lxxxvii).

Undated Issues.

251 HEMIDRACHM. (Type A, during HΞP).

Obv. Diademed and radiate head of Antiochus VI to r. in circle of dots.

Rev. BAΣIΛEΩΣ (to r.) ANTIOXOY (to l.). Apollo, naked standing to l., holds arrow in outstretched r., rests l. on bow.

London, no. 15, Plate IX; Paris, no. 1042 (Pl. xx, 19); Glasgow (Hunterian Coll.), nos. 16 and 17.

252 HEMIDRACHM. (Type B, during HΞP to ΘΞP).

Obv. Head as above.

Rev. BAΣIΛEΩΣ | ANTIOXOY (to r.) EΠIΦANOYΣ | ΔIONYΣOY (to l.). Panther to l., r. forepaw raised. In exergue, K.

Glasgow (Hunterian Coll.), nos. 18 and 19 (Pl. lxviii, 5); Coll. L. Walcher de Molthein, no. 3005 (Pl. xxvii).

253 HEMIDRACHM.

Obv. Similar. *Rev.* Similar. In exergue, ⚓.

Newell, Plate IX (formerly, Schulman, Kreling Sale, Dec., 1913, no. 541).

254 HEMIDRACHM.

Obv. Similar. *Rev.* Similar. In exergue, ⚓.

Newell.

255 HEMIDRACHM. (Type C, during ΘΞP to OP.)

Obv. Similar to no. 244. *Rev.* Inscription as above. Panther to l. holding palm in mouth and r. forepaw. Above ΣTA.

London, nos. 16, Plate IX, 17, and 18; Jameson Coll., no. 1728 (Pl. lxxxvii).

256 DIOBOL.

Obv. Similar head to r. *Rev.* ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΕΠΙΦΑΝΟΥΣ | ΔΙΟΝΥΣΟΥ (to l.). Thyrsos bound with fillet. ΣTA.

London, no. 19 (Pl. xix, 6); Petrograd, no. 520; Imhoof-Blumer, Monnaies Greeques, p. 435, no. 111.

Undated drachms struck 142 B. C.

257 DRACHM.

Obv. Diademed and radiate head of Antiochus VI to r. in circle of dots. *Rev.* ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΕΠΙΦΑΝΟΥΣ | ΔΙΟΝΥΣΟΥ (to l.). Macedonian helmet to r. adorned with spike, Ibex-horn and cheek pieces. On r., between horn and spike, TPY. On r., beneath helmet, ΑΡ.

Paris, nos. 1002 and 1003.

258 DRACHM.

Obv. Similar. *Rev.* Similar. On r., between horn and and spike, TPY. On r. beneath helmet, 𐡀 or 𐡁.

London, no. 22, Plate IX; Glasgow (Hunterian Coll.), no. 14 (Pl. lxviii, 4); Petrograd, no. 517; Paris, no. 1004.

259 DRACHM.

Obv. Similar. *Rev.* Similar. On r., between horn and spike, TPY. On r., beneath helmet, ⚓.

London, nos. 20 and 21; Petrograd, no. 518; Paris, no. 1005; Rome, Strozzi Sale, 1907, no. 1678 (Pl. xi).

260 DRACHM.

Obv. Similar.

Rev. Similar. On r., between horn and spike, TPY. On r., beneath helmet, Ꝑ.

Newell.

We have already noticed that during the first portion of the year ΗΞΡ, issues in the name of Demetrius II appeared at Antioch; the remainder of the same year was given up to the striking of coins for Antiochus VI. The little boy's head is engraved on the obverses of the new coins surrounded with the fillet border and adorned with the divine rays which had been introduced on the Seleucid coinage by his supposed grandfather, Antiochus IV Theus Epiphanes. It was no doubt to emphasize this alleged descent, that the new king took upon himself (or rather the regent Tryphon probably instigated the move as his protégé was only a child of some two or three summers) the surname of Epiphanes and the divine rays. The reverses of the new tetradrachms give us a spirited representation of the Twin Gods charging to left on horseback. The reason for this particular choice of type is obscure. M. Babelon, following Ott. Müller and Wieseler, suggests some incident at the battle which saw the defeat of Demetrius II and the triumph of Antiochus. It must be remembered, however, that the Dioscuri seem to have been particularly favored in Syria under their other name of Κάβειροι Συρίων. They had a temple near Seleucia on the Orontes, and they frequently appear on the coins of Seleucus I; their type is therefore not a sudden innovation in the Seleucid series. It is certain, however, that in this case the choice had nothing to do with the worship of these gods at Tripolis in Phoenicia as has been suggested — our coins being all struck at Antioch and it being very doubtful if Antiochus VI ever held Tripolis.[32]

If the reason for the choice of the surname Dionysus is also uncertain, the epithet certainly influenced the adoption of the wreath on the reverse of the tetradrachms and the types of the hemidrachms and diobols.

All of the tetradrachms and drachms issued for the year ΗΞΡ at Antioch show the three letters TPY of Tryphon's name and so bear witness to the preponderant position this man held in the government. The monograms and letters of subordinate mint officials are, as usual, placed in the field of the coin, and it is furthermore to be noted, that one and all of these were officiating under Demetrius II, many of them

[32] For a discussion of the significance of this type see Babelon, *loc. cit.*, cxxxv, ff.

under Alexander Balas and even Demetrius I showing, as we have already had ample opportunity to observe, how long a period of activity these lesser mint officials at Antioch enjoyed.

Under Demetrius II, during the last year of his rule in Antioch, we noticed a large issue of drachms. This issue continued under Antiochus VI with exactly similar types except for the change in portrait and name. Note that the symbol of the chief magistrate on these pieces is a BUNCH OF GRAPES. Before the close of the year another symbol, the Thyrsos, appears on the tetradrachms.

For the year ΘΞΡ the coinage of tetradrachms and drachms continues actively. At first the Thyrsos symbol again occurs on the tetradrachms but is almost immediately replaced by the letters ΣΤΑ which have caused considerable discussion among numismatists. The majority concur in seeing in them the initials of the name ΣΤΑφυλος and have explained this as either some honorary name of Tryphon, or as the personal name of some official holding an office only secondary to that of Tryphon. The Rev. E. Rogers (Num. Chron. Ser. IV, vol. xii, p. 254) thinks that it is but another name or title of Antiochus VI Dionysus because of the close mythological connection between the two names. From ancient authors we gather that the God Dionysus either had a son by this name, or that Staphylus was a son of Oenomaus, king of Assyria who protected the young Dionysus. It must be noted, however, that on all the Antiochene coin issues, from the first introduction of dating the coins in the year ΗΝΡ of Demetrius I, there appears, in addition to the many subordinate officials, a superior one who places his signature on *all* their issues so long as he remains in office. Under Demetrius I this was  ; under Alexander I it was  ,  , and  ; under Demetrius II it was  ; while under Antiochus VI all the drachms of the first issue, in addition to the customary subordinates, are signed Bunch of Grapes, the tetradrachms either the Thyrsos or nothing. The coins for the next year commence with the Thyrsos and the Bunch of Grapes[33] but these are soon dropped in favor of ΣΤΑ. The suggestion is obvious that ΣΤΑ is nothing more than the chief official at the Antiochene mint under Antiochus VI Dionysus, as had been under Demetrius I ; , , and under Alexander ; and under Demetrius II. If ΣΤΑ is correctly rendered Στάφυλος what more appropriate personal symbols could he choose than Thyrsos and Bunch of Grapes? It is of course, an unusual coincidence that Antiochus VI should take (or

[33] The drachm no. 235 has ΣΤΑ as well as the symbol.

be given) the name Dionysus and that at the same time a man of, one might say, Dionysiac name should be his mint master. There was, however, thus a double reason for the markedly Dionysiac character of the types chosen for the new coinage.

Year ΟΡ continues with a very heavy coinage of tetradrachms and drachms. There seems also to have been continued the striking of the more unusual denominations of the hemidrachm and diobol. The former had first appeared, probably in year ΗΞΡ, with the types used by Antiochus' father Alexander (see nos. 189-193) but these change almost immediately to ones of a definitely Dionysiac character.

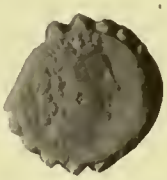


fig. 8







fig. 9

Among the bronze issues of Antioch for this reign are to be placed two denominations of serrated coins, both with obverse type of the little king's head radiate, and with reverse type (for the larger) elephant holding torch; (for the smaller) panther holding palm branch with mouth and right paw. Both these types bear the letters ΣΤΑ and, in addition the magistrate symbols Cornucopiae, Star, Palm Branch.

It was also in the year ΟΡ, the last of the reign, and perhaps at the very time the regent Tryphon was meditating his treacherous seizure of the throne, or even immediately after he had taken the final step, that there appeared a new issue of drachms with an innovation in the reverse type. The radiate head of the young Antiochus still holds the obverse, but on the reverse we see a Macedonian helmet of peculiar form, adorned in front with a large and conspicuous Ibex horn, henceforth to be the constant symbol of Tryphon. The letters ΤΡΥ (for the first time on the drachm) are conspicuously placed, but we no longer find a date. It is certain that Tryphon, so soon as he had seized the supreme power, discarded the use of the Seleucid Era for dating, and substituted one of his own. His Phoenician issues bear the dates Α to Δ, — in other words, his own regnal years. On the Antiochene issues, commencing with the above drachms, the very useful and, to us, most desirable custom of dating is now finally dropped from the silver coinage. The monograms of subordinate mint officials are, however, still continued from the preceding coinages.

TRYPHON, 142-138 B. C.

In and around the end of the year OP Tryphon felt his position in the kingdom strong enough to bring about the sudden death of the boy Antiochus, whose regent and guardian he had till then been, and to assume in name as well as in actuality the supreme power. He caused the troops under his command to declare him Βασιλεύς, he himself assumed the title Αὐτοκράτωρ "ruler by his own power"; in other words, the Seleucid line is supposed to have come to an end and a new one to have risen in its place. It must be remembered, however, that Demetrius II was still maintaining himself in the cities of the coast, from Selucia to near the Egyptian border, though Tryphon soon after his usurpation, came into possession of Ascalon and Ptolemais. For four years Tryphon ruled and was then suddenly overthrown by another scion of the House of Seleucus. Tryphon's Antiochene issues are the following:

261 TETRADRACHM.

Obv. Diademed head of Tryphon to r. in fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΤΡΥΦΩΝΟΣ (to r.) ΑΥΤΟΚΡΑΤΟΡΟΣ (to l.). Chased Macedonian helmet to l. with spike, large Ibex horn in front, cheek guards and taenia. Beneath helmet, 𐡗.

Glasgow (Hunterian Coll.), no. 1, Plate IX.

262 TETRADRACHM.

Obv. Similar.

Rev. Similar, but the entire design surrounded by an oak wreath. Beneath helmet, 𐡗.

Paris, no. 1043 (Pl. xxi, 1); Egger Sale xli, 1912, no. 716, Plate IX.

262a TETRADRACHM.

Obv. Similar.

Rev. Similar. Beneath helmet, 𐡈.

Electrotype in author's collection, present whereabouts of original unknown.

263 TETRADRACHM.

Obv. Similar.

Rev. Similar. No monogram.

London, no. 2 (Pl. xx, 1).

264 TETRADRACHM.

Obv. Similar.

Rev. Similar. Beneath helmet, 𐡐.

Paris, no. 1044.

265 DRACHM.

Obv. Similar to tetradrachm except that in place of fillet border there is dotted circle.

Rev. Similar to tetradrachm no. 261. On l., beneath helmet, Χ.

London, no. 4 (Pl. xx, 2); Hirsch, Rhonsopoulos Sale, 1905, no. 4461 (Pl. lv).

265a DRACHM.

Obv. Similar.

Rev. Similar. On l., beneath helmet, Ξ.

Newell.

266 DRACHM.

Obv. Similar.

Rev. Similar. On l., beneath helmet, ΧΡ.

Glasgow (Hunterian Coll.), no. 3.

267 DRACHM.

Obv. Similar.

Rev. Similar. On l., beneath helmet, ΓΗ.

Newell (formerly Egger Sale xlv, 1913, no. 699), Plate IX; Glasgow (Hunterian Coll.), no. 2; Roll. & Feuard., Duruflé Sale, 1910, no. 626 (Pl. xiv).

268 DRACHM.

Obv. Similar.

Rev. Similar. On l., beneath helmet, ΤΡ.

Egger Sale xli, 1912, no. 717 (Pl. xix).

269 DRACHM.

Obv. Similar.

Rev. Similar. On l., beneath helmet, Α.

London, no. 3; Jameson Coll., no. 1729 (Pl. lxxxvii) formerly Sotheby, Benson Sale, 1909, no. 764 (Pl. xxv); Paris, no. 1045 (Pl. xxi, 2); Petrograd, no. 540.

270 DRACHM.

Obv. Similar.

Rev. Similar. On l., beneath helmet, Ρ.

Paris, no. 1046; Petrograd, no. 541.

271 DRACHM.

Obv. Similar.

Rev. Similar. On l., beneath helmet, Δ.

Egger Sale, Jan., 1908, no. 615 (Pl. xvii).

272 DRACHM.

Obv. Similar.

Rev. Similar. On l, beneath helmet, Τ.

Hirsch (xxx), Percy Barron Coll., no. 597 (Pl. xviii).

We have seen that the useful system of dating the silver coins was discarded in the last issue of drachms bearing the portrait and names of Antiochus VI Dionysus. The coins, both silver and bronze, now struck with the portrait and titles of Tryphon the usurper, also bear no

dates; but the silver are still marked with the monograms of the same magistrates who had held office both in the preceding and in earlier reigns. Thus we meet once more and for the last time our old friends ⊼, and ⊓.[34] The Antiochene bronzes, as under Antiochus VI, bear symbols (Star, Akrostolion, Ear of Wheat, Caps of the Dioscuri) but are no longer serrated.

The Macedonian helmet chosen for the reverse type of all these issues has direct reference to the claim of Tryphon that,— according to the time honored Macedonian custom,— he was supposed to have been unanimously elected by free Macedonian soldiers in open assembly. There may also be intended a punning reference to his name, for in both Homer and Hesiod a helmet is sometimes called *τρυφάλεια*.

ANTIOCHUS VII EUERGETES, 138-129 B. C.

During the period covered by the reigns of Alexander Balas, Antiochus VI, and Tryphon, and the contemporaneous rule in Phoenicia of Demetrius II, the brother of the latter, Antiochus by name, was growing into manhood at the busy seaport and powerful city of Side in Pamphylia. When this young man, who had inherited much of his father's ability and strength of character, was somewhere between the ages of twenty and twenty-three, news suddenly reached him that his elder brother, Demetrius II, had been taken prisoner in distant Media whither he had gone to deliver the eastern provinces from Parthian domination and add them once more to the Seleucid dominions. There was now no legitimate Seleucid king in power, for Tryphon was everywhere considered a mere usurper.

Antiochus immediately left Side and landing in Syria, was received with acclaim by all, delighted once more to own allegiance to a rightful and legitimate sovereign of the House of Seleucus. Tryphon was deserted by both people and army. He sought safety in flight but was pursued from place to place until finally, cornered and in despair, he perished by his own hand. Antiochus VII Euergetes, popularly known as Sidetes on account of the place of his bringing up, now ruled alone in the lands of his ancestors.

[34] ⍙ occurs once more here, as well as under the following reign.

a. With ⏃ and one letter or monogram.

273 TETRADRACHM.

Obv. Diademed head of Antiochus VII to r. in fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΕΥΕΡΓΕΤΟΥ (to l.). Athene standing to l., helmeted, holds wreath-bearing Nike in outstretched r., rests l. on shield adorned with Medusa head, and holds spear. The whole surrounded by laurel wreath. On l., beneath Nike, ⏃ | ⏃ or ⏃.

J. Ward Coll., no. 795, Plate IX; London, no. 30; Amer. Num. Soc.

274 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., beneath Nike, ⏃ | ⊢P.

Newell.

275 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., beneath Nike, ⏃ | AI.

Newell; Paris, no. 1151; London, no. 29.

276 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., beneath Nike, ⏃ | ⋈.

Egger, Sale xlv, 1913, no. 764, Plate IX.

277 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., beneath Nike, ⏃ | ⍼.

Electrotype in author's collection. London, no. 28, and Petrograd, no. 575, may be this variety.

278 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., beneath Nike, ⏃ | ⊗.

Newell.

279 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., beneath Nike, ⏃ | H.

Paris, no. 1152; London, no. 31.

280 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., beneath Nike, ⏃ | Λ.

London, no. 32; Petrograd, no. 574.

281 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., beneath Nike, ⚓ | ΤΓ.

London, nos. 33, 34, and 35; Paris, nos. 1149 and 1150.

282 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., beneath Nike, ⚓ | A.

Paris, nos. 1147 and 1148; Petrograd, no. 572; Glasgow (Hunterian Coll.), no. 10; Newell (several specimens); Schulman, White-King Sale, 1904, no. 595 (Pl. vi); Sotheby, Bunbury Sale, no. 535 (Pl. v); Sotheby, Cumberland-Clark Sale, 1914, no. 278 (Pl. viii)

b. ⚓ | A and one monogram or letter.

283 TETRADRACHM.

Obv. Similar. *Rev.* Similar, but at times Nike faces to r. On l., beneath Nike, ⚓ | A. On r., behind Athene, ⛫.

Paris, nos. 1142 and 1143; London, no. 22; Glasgow (Hunterian Coll.), no. 9; Egger Sale, Jan., 1908, no. 620. Plate IX; Egger Sale xlv, 1913, no. 708 (Pl. xix).

284 TETRADRACHM.

Obv. Similar. *Rev.* Similar, with Nike at times facing to r. On l., beneath Nike, ⚓ | A. On r., behind Athene, ⍾.

Paris, nos. 1145 and 1158; London, no. 23a; Jameson Coll., no. 1730, Pl. lxxxvii; Glasgow (Hunterian Coll.), no. 7.

285 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., beneath Nike, ⚓ | A. On r., behind Athene, △.

Glasgow (Hunterian Coll.), no. 5, (Pl. lxviii, 14).

286 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., beneath Nike, ⚓ | A. On r., behind Athene, ΦΙ.

London, no. 27.

287 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., beneath Nike, ⚓ | A. On r., behind Athene, A.

Egger Sale, Jan., 1908, no. 623, Plate IX.

288 TETRADRACHM.

Obv. Similar.

Rev. Similar, sometimes Nike facing to r. On l., beneath Nike, Φ | A. On r., behind Athene, Δ.

Paris, no. 1144; London, no. 21; Yale Univ. Coll.; Newell.

289 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., beneath Nike, Φ | A. On r., behind Athene, H.

London, no. 20; Newell.

290 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., beneath Nike, Φ | A. On r., behind Athene, O.

Paris, no. 1146; London, no. 23; Petrograd, no. 571; Amer. Numis. Soc.

291 TETRADRACHM.

Obv. Similar.

Rev. Similar, Nike facing to r. On l., beneath Nike, Φ | A. On r., behind Athene, Σ.

Paris, no. 1157 (Pl. xxi, 14).

292 TETRADRACHM.

Obv. Similar.

Rev. Similar, Nike sometimes facing to r. On l., beneath Nike, Φ | A. On r., behind Athene, Φ.

London, no. 26; Petrograd, no. 582; Glasgow (Hunterian Coll.), no. 8; Egger Sale, Jan., 1908, no. 621 (Pl. xix); Newell; Santa Maria, Hartwig Sale, 1910, no. 821 (Pl. xv).

c. Φ | A and two letters.

293 TETRADRACHM.

Obv. Similar.

Rev. Similar, Nike facing to r. On l., beneath Nike, Φ | A. On l., between Athene and inscription, A. On r., behind Athene, B.

Paris, no. 1155.

294 TETRADRACHM.

Obv. Similar.

Rev. Similar, Nike facing to r. On l., beneath Nike, Φ | A. On l., between Athene and inscription, A. On r., behind Athene, E.

Glasgow (Hunterian Coll.), no. 11.

295 TETRADRACHM.

Obv. Similar.

Rev. Similar, Nike facing to r. On l., beneath Nike, ⚓ | A. On l., between Athene and inscription, A. On r., behind Athene, K.

Schulman Sale, Oct., 1912, no. 83 (Pl. ii).

296 TETRADRACHM.

Obv. Similar.

Rev. Similar, Nike sometimes facing to r. On l., beneath Nike, ⚓ | A. On l., between Athene and inscription, T. On r., behind Athene, A.

London, no. 25; Amer. Numis. Soc.

297 TETRADRACHM.

Obv. Similar.

Rev. Similar, Nike facing to r. On l., beneath Nike, ⚓ | A. On l., between Athene and inscription, T. On r., behind Athene, Λ.

Paris, nos. 1153 and 1154 (⚓ | A = Δ | A); Glasgow (Hunterian Coll.), nos. 13 and 14; Coll. L. Walcher de Molthein, no. 3020 (Pl. xxvii); Petrograd, nos. 577 and 580 (T = Γ?); Newell; H. R. Drowne Coll.

298 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., beneath Nike, ⚓ | A. On l., between Athene and inscription, O. On r., behind Athene, Λ.

Newell; London, no. 24; Paris, no. 1156..

299 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., beneath Nike, ⚓ | A. On l., between Athene and inscription, M. On r., behind Athene, K.

Petrograd, no. 576.

d. Drachms with ⚓ and one letter, contemporaneous with preceding three classes.

300 DRACHM.

Obv. Diademed head of Antiochus VII to r. in fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΕΥΕΡΓΕΤΟΥ (to l.). Nike advancing to l. holds wreath in outstretched r., and gathered drapery in l. On l., outside inscription, ⚓ | A.

Paris, no. 1162 (Pl. xxi, 15); London, no. 40; Glasgow (Hunterian Coll.), no. 15; Newell.

301 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ. On r., beneath wing, A.

London, no. 39.

302 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | Α.

Petrograd, no. 589.

303 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ. On r., beneath wing, Α.

Glasgow (Hunterian Coll.), no. 16.

304 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | Ο.

Newell, **Plate X**.

305 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ. On r., beneath wing, Ο.

London, no. 41; Paris, no. 1160; Petrograd, no. 586; Glasgow (Hunterian Coll.), no. 18 (Pl. lxviii, 15).

306 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | Π.

Paris, no. 1161; Petrograd, no. 587.

307 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ. On r., beneath wing, Π.

Jameson Coll., no. 1734 (Pl. lxxxvii); London, no. 42; Glasgow (Hunterian Coll.), no. 17; Paris, no. 1159; Petrograd, no. 583.

308 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | Φ.

Coll. L. Walcher de Molthein, no. 3032 (Pl. xxviii).

309 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ. On r., beneath wing, Φ.

Paris, no. 1163.

310 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ⊠ | ⏃.

Newell.

c. Issues without ⏃.

311 TETRADRACHM.

Obv. Similar to no. 273.

Rev. Similar to no. 273. On l., beneath Nike, ⊠ | A.

Glasgow (Hunterian Coll.), no. 3; Newell (monogram ⊠), Plate X.

312 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ⊓ | Δ.

Paris, no. 1164; Petrograd, nos. 591 and 592; Yale Univ. Coll.

312a DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ⊠ | ⍲.

Yale Univ. Coll.

313 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., beneath Nike, B | A.

London, no. 36; Glasgow (Hunterian Coll.), no. 4.

314 DRACHM.

Obv. Similar to no. 300.

Rev. Similar to no. 300. On l., outside inscription, A | B.

315 TETRADRACHM.

Obv. Similar to no. 273.

Rev. Similar to no. 273. On l., beneath Nike, ⋿ | A. In exergue, ⊠.

Petrograd, no. 573; Egger Sale xli, 1912, no. 728, Plate X.

316 DRACHM.

Obv. Similar to no. 300.

Rev. Similar to no. 300. On l., outside inscription, Σ.

Paris, no. 1165.

317 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Σ. On r., beneath wing, O.

London, no. 38.

Antiochus VII seems to have struck silver coins in great quantity at his mint in Antioch. The person who, as in the preceding reigns, was placed in charge of this coinage signs himself ⏃. This soon becomes ⏃ | A; but the letter A does not seem to belong to ⏃ as we find it in conjunction with other letters on the coins of class "e." Perhaps it is the initial of another official, or might even be taken as the initial letter of Antioch; in other words a real mintmark in the full sense of that term. On the death of Antiochus VII it disappears until the second issue (series "b") of the reign of Antiochus VIII. The monogram ⏃ we have already met with on the coinages of Seleucus IV, Antiochus IV, Antiochus V and Demetrius I, but it can hardly be that of the same person. As mint officials at Antioch seem to have enjoyed such long tenure of office, it would not do violence to our credulity to suppose that members of the same family and with similar names held the office at various times. Perhaps, therefore, this ⏃ is a son or even grandson of the first ⏃. The very fact that persons were employed in the mint for such a long time presupposes that they reached a grade of sufficient authority to sign the coins with their monogram or initial at a comparatively early age. It must be remembered that at Rome, at this time, one of the first steps for a young man desirous of entering public life was to be made a triumvir of the mint.

Among the subordinates of ⏃ we find ⏃, ⏃, and ⏃ all of whom were active under Antiochus VI and Tryphon, and so form the connecting link between the coinages of these rulers and those of Antiochus VII. At one period of Antiochus VII's reign the coinage of tetradrachms was so large that a more complicated system of supervision of the issues was temporarily introduced. In class "c" we have coins which are all supervised by both ⏃ and A (if this letter denotes a separate official) and, in addition, we have the sub-supervisors A, T (perhaps also Γ), O, and M with *their* subordinates A, B, E, K, Λ, and O. The style, too, of the majority of these particular coins shows hasty work, as if the mint were operating under unusual stress, and so, for this reason, new and poorer die-cutters had to be called in to assist in supplying the demand. It may even be possible to assign this group to the period (131-130 B. C.) when Antiochus was bending every energy to assemble an immense army for the approaching campaign against the Parthians.

There is little doubt but that the silver coin issues of Antiochus VII for Antioch can in time be worked out more surely and more

minutely than it has here been possible to do. The tetradrachms are so common that they are therefore not generally illustrated in the catalogues at my disposal. This means that only a comparatively small number could be studied from the standpoint of sequence of style and dies and so only a general outline of the issues has been given, which a study based on a larger number of actual examples or illustrations may later modify.

Although the Antiochene silver issues of this reign do not bear dates[35] we are most fortunately assisted by the contemporaneous bronze issues which do. These consist of four denominations as follows: I,

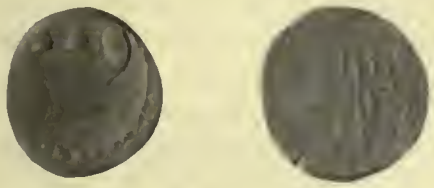


fig. 10



fig. 11



fig. 12



fig. 13

obv. Ship's prow, rev. Trident (fig. 10); II, obv. Winged bust of Eros, rev. Head-dress of Isis (fig. 11); III, obv. Lion's head, rev. Club (fig. 12); IV, obv. Prow of ship, rev. Caps of the Dioscuri (fig. 13). Taking together the facts that these are easily the commonest of all the bronze coins of Antiochus VII, that in style and fabric they are the immediate successors of the Antiochene bronze coins of Tryphon and bear many of the same symbols, and finally that the monogram ⊕ is found on practically every specimen, we see clearly proved that their mint must have been Antioch. They all bear dates from ΔΟΡ (Oct. 139-Oct. 138) to ΓΠΡ (Oct. 130-Oct. 129) inclusive, the former being the year in which Antiochus invaded Syria, the latter in which he met his death in the campaign against the Parthians. To be exact, during the summer and autumn of 130 B. C. occurred the successful battles in which Antiochus drove the Parthian out of Babylonia and Media, the winter of 130-129 was passed in Media, the spring of 129 saw the total defeat and death

[35] The series of tetradrachms (see Brit. Mus. Cat., pl. xx, 6) bearing dates from ΣΟΡ to ΒΠΡ and of Attic weight and royal type — in contradistinction to the dated issues of this king of Phoenician type and weight — did not emanate from our mint.

of the Seleucid king. The bronze issues bearing his name and the date ΓΠΡ must have come to an end with the receipt in Antioch of the news of the great disaster in the late spring of 129 B. C.

DEMETRIUS II, Second Reign in Antioch 129-128 B. C.

The last we heard of Demetrius II was as captive of the Parthian king. Phraates, early in 129 B. C., to ward off the threatening blow of Antiochus VII and not counting on his own sudden victory, sent Demetrius back to Syria with a small force to cause a diversion in Antiochus' absence. With the death of Antiochus everything was changed, and Phraates made a vain attempt to recapture Demetrius. But the latter succeeded in making good his escape and arrived in Antioch about the same time as the news of Antiochus' end. Once more Demetrius was king in Syria.

318 TETRADRACHM.

Obv. Diademed and bearded head of Demetrius II to r. in fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΔΗΜΗΤΡΙΟΥ (to r.) ΘΕΟΥ | ΝΙΚΑΤΟΡΟΣ (to l.). Zeus enthroned to l., holds wreath-bearing Nike in r., rests l. on sceptre. On l., outside inscription, 𐡀.

Paris, no. 1218.

319 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, 𐡀 | Ε (?).

Jameson Coll., no. 1735 (Pl. lxxxviii).

320 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ξ. Beneath throne, Ο.

Newell, Plate X; Egger Sale, xli, 1912, no. 733 (Pl. xx); Egger Sale xlv, 1913, no. 715 (Pl. xx); Egger Sale, Jan., 1908, no. 628 (Pl. xix); London, no. 17; Paris, no. 1212; Petrograd, no. 607; Glasgow (Hunterian Coll.), no. 2.

321 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ξ. Beneath throne, Δ.

London, no. 18, Plate X; Paris, nos. 1215 and 1216.

322 DRACHM.

Obv. Similar. *Rev.* Similar. In exergue, ΞΟ.

Egger Sale xli, 1912, no. 734 (Pl. xx).

323 DRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, Ξ. Beneath throne, Δ.

Newell, Plate X; Glasgow (Hunterian Coll.), no. 4; Paris, no. 1217.

324 DRACHM.

Obv. Similar. *Rev.* Similar. No letters.

London, nos. 19 (Pl. xxi, 4) and 20; Petrograd, no. 610.

325 DRACHM.

Obv. Similar. *Rev.* Similar. Between feet, Δ. Beneath throne, Ω.

Glasgow (Hunterian Coll.), no. 5 (Pl. lxviii, 24).

In conjunction with the above may have been struck the bronze coins with reverse type Nike to left (Brit. Mus. Cat., Plate xxi, 12, and Hunterian Coll., Plate lxix, 3) and the letter Ξ in field and symbol Cornucopiae outside the inscription (fig. 14). The Ξ is found on the



fig. 14

silver issues of this mint, and the symbol is a common one on the bronzes of Antiochus VII also struck here.

Demetrius did not long enjoy his newly regained kingdom in its entirety. He had hardly returned to Antioch when his mother-in-law,[36] Queen Cleopatra of Egypt, begged his support to restore her to her kingdom from which she had just been driven by her brother, Ptolemy Euergetes. Demetrius spent the winter of 129-128 collecting an army for the invasion of Egypt. In the spring he set out but was checked at Pelusium, for Antioch had suddenly risen in revolt behind him. Ptolemy seized this opportunity to send an Egyptian army to that city, and, with the inhabitants acclaim, to set upon the throne a creature of his own, said to be of Seleucid descent and an adopted son of Antiochus VII. The name of this new usurper was Alexander, pop-

[36] Bevan, *loc. cit.*, page 248.

ularly called Zabinas or the "Bought-one."[37] Demetrius was thus relegated, once more, to Seleucia and the Phoenician cities. His coinage in Antioch was therefore of but short duration, — from the late spring of 129 to the spring of 128. His issues here are the continuation of the last ones under Antiochus VII on which the monogram ⊠ and the letters Ξ and O[38] are found. It is probably only due to the preparations against Egypt that his Antiochene issues are fairly prolific, when we consider the short period of their striking.

ALEXANDER II, 128-123 B. C.

We have just seen the circumstances surrounding the accession to the Seleucid throne of Alexander II. His dominions at first did not extend much further than over Antioch and the valley of the middle Orontes.

a. ΙΣΙ in field.

326 TETRADRACHM.

Obv. Diademed head of Alexander II to r. in fillet border.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ΑΛΕΞΑΝΔΡΟΥ (to l.). Zeus enthroned to l. holds wreath-bearing Nike in outstretched r., rests l. on sceptre. On l., outside inscription, ΙΣΙ. Beneath throne, Δ.

Paris, nos. 1278 (Pl. xxiii, 4) and 1279.

327 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ΙΣΙ. Beneath throne STAR over Δ.

Num. Chron., 1883, Pl. vi, 5; Paris, no. 1280; Petrograd, nos. 632, 633, and 634.

328 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ΙΣΙ. Beneath throne, Σ.

Hirsch, Weber Sale, 1908, no. 4112 (Pl. liii).

329 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ΙΣΙ. Beneath throne, STAR over Σ.

J. Ward Coll., no. 797, Plate X; London, no. 2; Paris, no. 1281.

[37] Bevan, *loc. cit.*, page 249.

[38] See nos. 311, 315, 317.

330 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, IΣI. Beneath throne, STAR over ⍋.

Petrograd, no. 638.

331 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, IΣI. Beneath throne, STAR over ⍟.

Schulman, White-King Sale, 1904, no. 610 (Pl. vi).

b. ⍓ in field.

332 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ⍓. Beneath throne, Δ.

Egger Sale xlv, no. 720 (Pl. xx).

333 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ⍓. Beneath throne, STAR over Δ.

Petrograd, no. 635 ; C. S. Bement Coll.

334 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ⍓. Beneath throne, STAR over Σ.

Egger Sale xli, 1912, no. 735, Plate X.

335 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ⍓. Beneath throne, ⍓.

Egger Sale, Jan., 1908, no. 632 (Pl. xx); Sotheby, Cumberland-Clark Sale, 1914, no. 283 (Pl. viii).

336 DRACHM.

Obv. Similar.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ΑΛΕΞΑΝΔΡΟΥ (to l.). Helmeted Athene standing to l. holds wreath-bearing Nike in outstretched r., rests l. on shield and spear. On l., outside inscription, ⍓ | A.

London, no. 5, Plate X.

337 HEMIDRACHM.

Obv. Similar.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ΑΛΕΞΑΝΔΡΟΥ (to l.). Single cornucopiae. On l., outside inscription, ⍓ (⍓?) | Σ.

Glasgow (Hunterian Coll.), no. 12 (Pl. lxix, 9).

338 DIOBOL.

Obv. Similar.

Rev. BAΣIΛEΩΣ (to r.) AΛEΞANΔPOY (to l.). Inverted anchor.

Paris, no. 1297 (Pl. xxiii, 8).

c. 𐤀𐤐 in field.

339 TETRADRACHM.

Obv. Similar to no. 326.

Rev. Similar to no. 326. On l., outside inscription, 𐤀𐤐. Beneath throne, Δ.

Egger Sale, Jan., 1908, no. 631, Plate X; London, no. 4 (Pl. xxii, 2); Glasgow (Hunterian Coll.), no. 4; Paris, no. 1283.

340 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, 𐤀𐤐. Beneath throne, Σ.

Paris, no. 1282; Glasgow (Hunterian Coll.), no. 5; Sotheby, Headlam Sale, 1916, no. 449 (Pl. x).

341 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, 𐤀𐤐. Beneath throne, AΦ (sometimes has form AI).

Egger Sale xlv, 1913, no. 768 (Pl. xxi); Newell; Amer. Num. Soc.

342 DRACHM.

Obv. Diademed head of Alexander II to r. in dotted circle.

Rev. BAΣIΛEΩΣ (to r.) AΛEΞANΔPOY (to l.). Double cornucopiae bound with taenia. On l., between design and inscription, 𐤀𐤐 | Δ.

Glasgow (Hunterian Coll.), no. 8; Jameson Coll., no. 1741, Plate X.

343 DRACHM.

Obv. Similar.

Rev. Similar. On l., between design and inscription, 𐤀𐤐 | Σ.

Paris, no. 1291 (Pl. xxiii, 5); Glasgow (Hunterian Coll.), no. 9; London, no. 6.

344 DRACHM.

Obv. Similar.

Rev. Similar. On l., between design and inscription, 𐤀𐤐 | AΦ.

Paris, no. 1292; Glasgow (Hunterian Coll.), no. 7.

345 DRACHM.

Obv. Similar.

Rev. Similar. On l., between design and inscription, 𐤀𐤐 | ΔI (or is this also AΦ?).

Paris, no. 1293.

346 HEMIDRACHM.

Obv. Similar.

Rev. Single cornucopiae. On l., outside inscription, ΓΡ. On l., between design and inscription, Δ.

Glasgow (Hunterian Coll.), no. 11.

d. Ξ in field.

347 TETRADRACHM.

Obv. Similar to no. 326.

Rev. Similar to no. 326. On l., outside inscription, Ξ. Beneath throne, Δ.

Paris, no. 1289; Sotheby, Delbeke Coll., 1907, no. 222, Plate X.

348 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ξ. Beneath throne, Σ.

Glasgow (Hunterian Coll.), no. 6 (Pl. lxix, 7).

349 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ξ. Beneath throne, A.

Paris, no. 1288.

350 DRACHM.

Obv. Similar to no. 342.

Rev. Similar to no. 342. On l., between design and inscription, Ξ | Σ.

Glasgow (Hunterian Coll.), no. 10 (Pl. lxix, 8); Petrograd, no. 639.

351 DRACHM.

Obv. Similar.

Rev. Similar. On l., between design and inscription, Ξ | AΦ.

Newell; London, no. 7, Plate X.

352 HEMIDRACHM.

Obv. Similar to preceding.

Rev. ΒΑΣΙΛΕΩΣ (to r.) ΑΛΕΞΑΝΔΡΟΥ (to l.). Winged Nike advancing to l., holds wreath in outstretched r., palm branch in l. On l., between figure and inscription, Ξ | AΦ.

London, nos. 10 (Pl. xxii, 5) and 11.

e. ⁂ in field.

353 TETRADRACHM.

Obv. Similar to no. 326.

Rev. Similar to no. 326. On l., outside inscription, ⁂. Beneath throne, Σ.

Jameson Coll., no. 1739, Plate X.

354 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, 𐡀. Beneath throne, A.

Paris, no. 1286.

355 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, 𐡀. Beneath throne, A|.

Petrograd, no. 637.

f. 𐡀 in field.

356 DRACHM.

Obv. Similar to no. 342.

Rev. Similar to no. 342. On l., between design and inscription, 𐡀 | AΦ.

Paris, no. 1294.

357 DRACHM.

Obv. Similar.

Rev. Similar. On l., between design and inscription, 𐡀 | A|.

London, no. 8.

g. No monograms or letters.

358 GOLD STATER.

Obv. Diademed head of Alexander II to r. in fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΛΕΞΑΝΔΡΟΥ (to r.)ΘΕΟΥ | ΕΠΙΦΑΝΟΥΣ(to l.)ΝΙΚΗΦΟΡΟΥ (in exergue). Zeus enthroned to l., holds wreath-bearing Nike in outstretched r., and rests l. on sceptre.

London (formerly Montagu Coll., Sotheby, March, 1896, no. 716) Plate X.

The Antiochene tetradrachms of Alexander follow those of Demetrius II in style and type: obverse, the king's head, reverse, Olympian Zeus enthroned. Five supervising magistrates ΙΣΙ, 𐡁, 𐡐, Ξ, 𐡀, corresponding perhaps to the five years of Alexander's reign, place their signatures in the field of the tetradrachms, while their subordinates, four to each superior, place their signatures beneath the Zeus throne. ΙΣΙ we know to have been in office shortly after the revolt which overthrew Demetrius' rule in Antioch (spring of 129 B. C.) and continued therein until the end of that year or the commencement of the next. This fact is determined by a series of bronze coins, consisting of two denominations as follows: (I) Diademed head of Alexander Zebinas, rev., standing Dionysus; (II) Bust of winged Eros, rev., Anchor, all




fig. 15




fig. 16

bearing the signature ΙΣΙ and the dates ΔΠΡ (year ending October 128 B. C.) and ΕΠΡ (after October 128), of the latter only one or two specimens being known. The next series of bronze that we can with certainty attribute to Antioch, also consists of two denominations: (I)




fig. 17

Head of Alexander in lion's skin, rev., Nike to left; (II) Helmeted head of Alexander, rev., Tyche with rudder (Hunterian Coll., no. 40, Pl. lxix, 12). These pieces bear no date, but have the signature ΚΡ of the third magistrate found on the tetradrachms. The dating of the bronze issues seems, therefore, to have been discontinued shortly after the commencement of the year ΕΠΡ.

The first issue of drachms has a standing Athene for their reverse type, which in the next issue is changed to a double cornucopiae; the half drachm has the single cornucopiae. The letters and monograms of the fractional pieces are the same as on the larger denomination with the exception of the last issue of the drachm which has ⊀, a monogram which does not occur on the tetradrachm. But, in revenge, the latter have the monogram ⅋ not found on the drachms.

In no. 358 we have a special coinage of gold staters which in style seem to parallel the later issues of the silver coins. This would corroborate the suggestion already made by M. Babelon (*loc. cit.*, p. cl.) that their appearance was closely connected with the famous seizure of the golden Nike from the statue of Olympian Zeus set up by Antiochus IV in the Apollo temple at Daphne. To such straits had the royal treasury been reduced under Alexander II! When the people murmured at this sacrilege, Alexander is said to have replied that he was only 'accepting the victory that Zeus offered him' — this after he had but a short time previously been routed by the army of Antiochus VIII!

Quite in keeping with the spirit of this reply would be the title Nikephoros and the Zeus type of the coins struck from the metal of the stolen statue.

REGENCY OF CLEOPATRA FOR ANTIOCHUS VIII.

Rule in Antioch 122-120 B. C.

This strong-willed queen, first the wife of Alexander Balas, then of Demetrius II, and during the latter's captivity in Parthia, of Antiochus VII, received with ill grace the return of Demetrius now imbued with Parthian manners. When in 126 B. C. he was disastrously defeated by Alexander II she repudiated him and seized the reins of government in her own name and that of their joint son Antiochus — nicknamed Grypus because of his hooked nose. Demetrius himself perished a short time after and Cleopatra divided the Seleucid lands with the usurper Alexander. Cleopatra soon secured the assistance of Ptolemy against the man he himself had once helped to place on the throne of Syria. The forces of Alexander were completely routed in 123 B. C., and in the following year Cleopatra and her son, now Antiochus VIII, secured the possession of the capital Antioch. It was in this year then (Aer. Sel. ϘP or 190) that coins were first struck at the Antiochene mint in the joint names and bearing the portraits of Cleopatra and Antiochus, although their coins had been appearing at Ake-Ptolemais since ΖΠΡ.

359 TETRADRACHM.

Obv. Draped bust of Cleopatra with stephanos to r., in front of diademed head of Antiochus VIII. Border of dots.

Rev. ΒΑΣΙΛΙΣΣΗΣ | ΚΛΕΟΠΑΤΡΑΣ (to r.) ΚΑΙ | ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to l.). Zeus, legs draped, end of chlamis hanging over l. arm, seated to l., holds wreath-bearing Nike in outstretched r., rests l. on sceptre. On l., outside inscription, ΙΕ. Beneath throne, Α.

Glasgow (Hunterian Coll.), no. 3, **Plate XI.**

360 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ΙΕ. Beneath throne, Δ.

Newell, **Plate XI**; London, no. 5; Petrograd, no. 661.

361 TETRADRACHM.

Obv. Similar. *Rev.* Similar. On l., outside inscription, IE. Beneath throne, AI.

Paris, no. 1361 ; L. & L. Hamburger, Sale of Prince Alexander of Hesse, Oct., 1889, no. 288 (Pl. ii).

The style and details of the reverses of these tetradrachms is the same as those of Alexander II for Antioch, as are also the subordinate magistrates A, Δ, and AI all of whom are found active under the two reigns. The silver issue is small while that of the bronze is much larger. In the latter we have two denominations, fortunately all dated.



fig. 18



fig. 19

The largest has obverse, Diademed and radiated head of Antiochus VIII, reverse, Owl on amphora and inscription identical to that on the tetradrachms. The small denomination has obverse, Bust of Tyche, reverse, Rudder handle and a similar inscription. It is noticeable that the inscription on both the bronze and the silver issues of Antioch omits the title Θέα after Cleopatra's name, a peculiarity not found on the issues of the other large mint at Ake-Ptolemais where coins of regal types and Attic weight were being struck at this time. Another and absolute proof that our tetradrachms and the bronzes just described belong together lies in the fact that the same supervising magistrate signs his initials (IE) on both. This magistrate (IE) is perhaps the same individual who in ΣΤΡ is found signing the issue of Phoenician tetradrachms struck by Demetrius II at Ascalon (Jameson Coll., no. 1736, Pl. lxxxviii). He seems to have later become a supporter of Cleopatra and as a reward was placed in charge of the central mint at Antioch when that city came under her dominion on the fall of Alexander. His assistants, however, belong to Antioch, and their signatures, together with the style and technique of the new coins issued, prove the Syrian capital to have been the mint. The subordinates on the silver sign with letters, on the bronze with symbols, a peculiarity already long in vogue on the coinages of our mint. These bronzes, in addition to the letters IE and the symbols, all bear the dates ϥP and AϥP, showing that the issues in the two metals appeared early in 122

B. C. and lasted till perhaps the end of 121 B. C. We have coins dated as late as ΒϥΡ with the portraits and names of Cleopatra and Antiochus VIII for Sidon and Ake-Ptolemais, but their Antiochene issues seem to have ceased in ΑϥΡ (Oct. 122-Oct. 121).

ANTIOCHUS VIII.

First rule in Antioch, 121-113 B. C.

Sometime in the course of the year 121-120 B. C. Antiochus VIII found cause to suspect the designs of his mother Cleopatra and forced her to drink a poison cup which she had actually intended for him. After this event Antiochus VIII ruled alone in what remained of the Seleucid dominions.

a. Athene type.

362 TETRADRACHM.

Obv. Diademed head of Antiochus VIII to r., in fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΕΠΙΦΑΝΟΥΣ (to l.). Athene, helmeted and adorned with Aegis, standing to l., holds wreath-bearing Nike in outstretched r., spear in l. which she rests on shield. The whole in laurel wreath. On l., outside inscription, ΙΕ | Θ.

London, no. 17 **Plate XI**; Newell; Petrograd, no. 687.[38]

363 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ΙΕ | Ⅎ.

Paris, no. 1428.

364 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ΙΕ | ⋈.

Paris, no. 1429 (Pl. xxv, 7).

In the Brit. Mus. Cat., Syria, nos. 18, 19, and 20 of Antiochus VIII are three coins which may belong to this series, but as none of them have the characteristic letters ΙΕ and as I have not been able to study them in the original or in casts, they have not been included.

[38] Jameson Coll., no. 1746 (Pl. lxxxviii) has not been included as it appears to be a barbaric imitation.

b. Zeus Uranius type.

365 TETRADRACHM.

Obv. Similar.

Rev. Similar inscription. Zeus Uranius, naked to waist, end of chlamis over l. shoulder, standing to l., head adorned with crescent, holds star in outstretched r., rests l. on sceptre. The whole enclosed in laurel wreath. On l., outside inscription, IE | A. On r., between figure and inscription, A.

Paris, no. 1416; Jameson Coll., no. 1745, Plate XI; Petrograd, no. 677.

366 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, IE | A. On r., between figure and inscription, AI.

Glasgow (Hunterian Coll.), no. 7.

367 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, IE | A. On r., between figure and inscription, N.

London, no. 10; Glasgow (Hunterian Coll.), no. 8; Newell.

368 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, IE | A. On r., between figure and inscription, O.

Paris, no. 1413 (Pl. xxv, 3); Schulman Sale, 1904, White-King Coll., no. 617 (Pl. vi).

369 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, IE | A. On r., between figure and inscription, P.

Paris, no. 1419.

370 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, IE | A. On r., between figure and inscription, A. In exergue, K.

Paris, no. 1418.

371 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, IE | A. On r., between figure and inscription, AI. In exergue, K.

London, no. 9, Plate XI.

372 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, IE | A. On r., between figure and inscription, P. In exergue, K.

Newell.

373 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, IE | A. On r., between figure and inscription, Φ. In exergue, K.

J. Ward Coll., no. 799 (Pl. xx); Paris, no. 1415.

374 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, IE | A. On r., between figure and inscription, N. In exergue, N.

London, no. 11; Newell.

375 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, IE | A. On r., between figure and inscription, P. In exergue, P.

Paris, no. 1414.

376 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, IE | A. In exergue, Δ.

Newell, Plate XI.

376a TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, IE | A. In exergue, P.

London, no. 12.

377 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, IE | A. In exergue, Φ.

Paris, no. 1417.

378 TETRADRACHM.

Obv. Similar.

Rev. Similar, but Zeus entirely undraped. On l., outside inscription, ΙΕ | Α. In exergue, ΤΤ.

London, no. 16.

c. Drachms with Tyche type.

379 DRACHM.

Obv. Diademed head as above, in fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΕΠΙΦΑΝΟΥΣ (to l.). Tyche standing to l. holds rudder in r., cornucopiae in l. On l., outside inscription, ΙΕ.

Petrowicz Coll. (published by Dr. Macdonald in the Zeitschrift für Numismatik, 1912, vol. 29, Pl. v, 13). Because of the very youthful head on this coin it probably is to be placed under the first issue of this reign.

380 DRACHM.

Obv. Similar, but an older portrait and with border of dots.

Rev. Similar. On l., outside inscription, (Ι)Ε.

Petrowicz Coll. (published by Dr. Macdonald in the Zeitschrift für Numismatik, 1912, vol. 29, Pl. v, 14).

The tetradrachms just catalogued are accompanied throughout by a bronze coinage consisting of two denominations: (I) obverse, Radi-

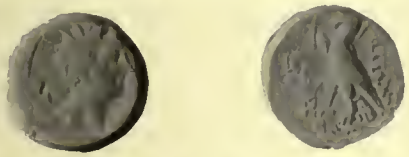


fig. 20



fig. 21

ate and diademed head of Antiochus VIII to right, reverse, Eagle to left (fig. 20); (II) obverse, Bust of Artemis, reverse, standing Apollo (fig. 21). As the tetradrachms, so these bronze coins all bear the magistrate's initials ΙΕ. In addition the bronze coins bear dates from ΒϘΡ to ΘϘΡ inclusive, definitely placing the silver issues within a period commencing not earlier than October 121 or lasting not later than October 113 B. C. But we know from our historical sources that in the latter year the half brother of Antiochus Grypus, also named Antiochus with the nickname Cyzicenus, having received help from Egypt and having invaded Cilicia, at last obtained the decision over Antiochus VIII (Grypus) and drove him out of Antioch. This event probably took place in the early spring of 113 B. C. at the commencement of the campaigning season.

ANTIOCHUS IX. First rule in Antioch, 113-112 B. C.

Antiochus IX Philopator, nicknamed Cyzicenus, now ruled in Antioch and struck the following coins.

381 TETRADRACHM.

Obv. Diademed head of Antiochus IX, with slight beard, to r. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΦΙΛΟΠΑΤΟΡΟΣ (to l.). Athene, helmeted, standing to l. holds wreath-bearing Nike in outstretched r., rests l. on shield and holds spear. The whole surrounded by laurel wreath. On l., outside inscription, Ɲ | A.

Paris, no. 1474; Petrograd, no. 711.

382 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ɲ | A. On r., between figure and inscription, A.

Newell, Plate XI; Newell; Paris, nos. 1469 and 1470; Glasgow (Hunterian Coll.), no. 5; Hirsch, Weber Sale, 1908, no. 4132 (Pl. liv); Sotheby, O'Hagan Sale, 1908, no. 694 (Pl. xi).

383 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ɲ | A. On r., between figure and inscription, Δ.

Glasgow (Hunterian Coll.), no. 6; Paris, no. 1473.

384 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ɲ | A. On r., between figure and inscription, N.

Paris, nos. 1471 and 1472; Petrograd, nos. 708, 709, and 710; Glasgow (Hunterian Coll.), no. 7; London, no. 14; Amer. Num. Soc.; Egger Sale, Jan., 1908, no. 652 (Pl. xx).

385 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ɲ | A. On r., between figure and inscription, O.

Glasgow (Hunterian Coll.), no. 8 (Pl. lxx, 3); Newell; London, no. 13.

The reverse type here chosen by Antiochus IX Cyzicenus for his tetradrachms, reproduces exactly that of his father Antiochus VII, a

gentle reminder to his subjects of his claim to the Syrian throne. ⊼ is now supervising magistrate in the place of Grypus' man IE, but the accompanying A still remains. Although the superior has been changed, the subordinates have not, and so we find Δ, N, O in office during both coinages. As under Grypus, so now, we have a corresponding issue of bronze coins which, being dated, establishes the exact period at which the entire series appeared. As yet only one denomination has turned



fig. 22

up, obverse, Head of Antiochus IX of exactly similar style and appearance as on the tetradrachms; reverse, Thunderbolt. The monogram ⊼ which these bronze coins all bear associates them unmistakably with the silver, and the dates ΘϘP and Ξ place them between the end of 114 and the beginning of 112 B. C. As Grypus' bronze coins end with a plentiful issue under the date ΘϘP, the present pieces could not have appeared earlier than the spring of 113 B. C. and it is at just this date that our historical sources[39] place the first arrival of Cyzicenus in Antioch.

The new king, however, did not long hold the Syrian capital; for by the following year Grypus, having reorganized his forces, returned, defeated his half brother near Antioch, drove him into flight and laid siege to the city now defended by Cyzicenus' wife Cleopatra. In due course the city fell, and Cleopatra was murdered at the jealous and vindictive insistence of her own sister Tryphaena, the wife of Grypus. The latter was now once more master in Antioch and naturally put an end to the coinage bearing the name, portrait, and types of his brother. These events are proved by the coins to have taken place not later than the spring and summer of 112 B. C., for under the following section is described a bronze coin of Grypus of Antiochene mintage also with the date Ξ (year ending October 112 B. C.). The city must therefore have surrendered some little time before the beginning of October of that year.

[39] Euseb. I, 257, 38, where this event is placed in the fourth year of the 166th Olympiad, or exactly 113 B. C.; see also Justin XXXIX, 2, 9, "Octo annis" that is 121–113.

ANTIOCHUS VIII. Second reign in Antioch, 112 B. C.

Although, as we have seen, Cyzicenus had suffered a bad defeat outside Antioch and had been forced to leave his wife Cleopatra to defend that city, he must never-the-less have saved a goodly portion of his army and received some reinforcements in addition, for our historians relate that soon after the terrible death of Cleopatra at the hands of Tryphaena, he returned, defeated Grypus, and seized and executed Tryphaena. Grypus found himself so hard pressed that he had once more to evacuate Antioch and fled as far as Aspendus.

We have a bronze coin (Paris, no. 1401) of the same types as described under the first coinage of Grypus but dated ϛ. This can only be assigned, on account of the date, to the short period of his second rule in Antioch. As only one specimen has come down to us, the coinage must have been small, which fact harmonizes well with the very short duration of time during which it could have been struck. No silver coins have as yet been published that could, with any probability, be assigned to this particular period.

ANTIOCHUS IX. Second rule in Antioch, early in 111 B. C.

After avenging himself on the person of Tryphaena for the murder of his wife, Cyzicenus did not long enjoy his regained kingdom. By the spring or summer of 111 B. C., Grypus had once more recuperated his forces, and returning from Aspendus drove his half brother out of the capital.[40] Even so, however, Cyzicenus found enough time to issue the following rare tetradrachm.

386 TETRADRACHM.

Obv. Diademed head of Antiochus IX, with indication of beard, to r. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΦΙΛΟΠΑΤΟΡΟΣ (to l.). Athene, helmeted, standing, to l., holds wreath-bearing Nike in outstretched r., her l. holds spear and rests on shield. On l., outside inscription, ϺΜ | Α. On r., between figure and inscription, Γ.

Coll. L. Walcher de Molthein, no. 3058 and later in the S. Rosenberg (Frankfurt A/M) Sale, March, 1914, no. 143 (Pl. v), Plate XI; Paris, no. 1475.

[40] Eusebius (ed. Schoene) actually says: "Postquam Antiokhus in Aspentum se recepit, A. CLXVII Olompiadis anno primo (= 112–111 B. C.), Kizikenus Antiokhus est potitus. Verum secundo anno eiusdem Olompiadis (= 111–110 B. C.), iterum reversus ab Aspeuto Antiokhus et ipse Syriam tenet, Kizikenus vero aliquam partem."

Cyzicenus' second reign in Antioch was of such short duration (late in the year 112 to early in the year 111 B. C.)[40] that there could not have been many coins struck. No bronze coins have been published that can with certainty be assigned to this time. The suggestion, however, is here made that the silver tetradrachm just described might have appeared during this short interval between Grypus' second and third reigns in Antioch. The superviser Μ is known only from the two specimens in existence described above and could not therefore have long been in office. The accompanying Α associates this coin with all the Antiochene issues of both Grypus and Cyzicenus, the style is most like the issues of Grypus for his third reign and a compromise between the styles of Cyzicenus' first and third reigns, the subordinate Γ has not appeared before but is actually found on the immediately succeeding issue of Grypus. All these internal evidences seem to point to the attribution here suggested.

ANTIOCHUS VIII. Third reign in Antioch, 111-109 B. C.

As related above, Grypus by the early summer of 111 B. C. had once more appeared[41] in Syria, driven Cyzicenus from Antioch, and commenced what was now his third reign in that city.

387 TETRADRACHM.

Obv. Diademed head of Antiochus VIII to r. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΕΠΙΦΑΝΟΥΣ (to l.). Zeus Uranius, head adorned with crescent, lower part of body draped, end of chlamis over l. shoulder, standing to l., holds star in outstretched r., rests l. on sceptre. On l., outside inscription, Φ | Α. On r., between figure and inscription, Γ.

Paris, no. 1421 ; Newell.

388 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | Α. On r., between figure and inscription, Δ.

Newell, Plate XI [formerly Egger Sale xlv, 1913, no. 771 (Pl. xxi)].

[40] See note on preceding page.

[41] Euseb., 259, 2, : Olymp. 167, 2 = 111/10 B. C.

389 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ⚘ | A. On r., between figure and inscription, K.

Paris, no. 1422; Petrograd, no. 678; Newell.

390 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ⚘ | A. On r., between figure and inscription, Ξ.

Newell, Plate XI.

391 DRACHM.

Obv. Diademed head of Antiochus VIII to r. in dotted circle.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΕΠΙΦΑΝΟΥ (to l.). Tripod. On l., outside inscription, ⚘ | Γ.

Glasgow (Hunterian Coll.), no. 15.

392 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ⚘ | N.

London, nos. 7 and 8; Jameson Coll., 1749, Plate XI; Glasgow (Hunterian Coll.), no. 16; Paris, no. 1423 (Pl. xxv, 4).

393 HEMIDRACHM.

Obv. Similar.

Rev. Similar inscription. Winged Nike to l., holds wreath in outstretched r., palm branch in l. On l., outside inscription, ⚘ | Γ.

London, nos. 9, Plate XI, and 10; Petrograd, no. 689; Newell.

394 HEMIDRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ⚘ | N.

Glasgow (Hunterian Coll.), no. 18.

395 DIOBOL.

Obv. Similar.

Rev. Similar inscription. Ear of wheat, on stalk with two leaves, to r. On l., in field, ⚘ | A.

Imhoof-Blumer, Monnaies Grecques, p. 436, no. 116.

For this series of tetradrachms ⚘ is mint supervisor. The letter A, as heretofore, accompanies the monogram, together with the subordinates Γ, Δ, K, and Ξ, all of whom we have met with before.

In addition to the drachm we find the hemidrachm and diobol, both of which denominations had not been struck for some time.

Accompanying the silver coins are three varieties of bronzes, all evidently of the same denomination, and two of them fortunately dated. In the Hunterian Collection at Glasgow are bronze coins nos. 39-41 (Plate lxx, 2) with the same types as are found in the first and second reigns of Grypus at Antioch, namely: obverse, Head of Antiochus VIII, reverse, Eagle to left, the inscription giving Grypus the (for his coins) unusual title Philometor, and in the exergue the date ΒΣ (between October 111 and October 110). In Paris (no. 1404, Plate xxv, 1) is a similar coin but with the more usual title Epiphanes. The date on this piece is also ΒΣ. These particular coins seem to be scarce; the more usual bronzes struck for the remainder of this period of Grypus' rule in Antioch have for their obverse type, Head of Antiochus VIII, for the reverse, Tripod surmounted by a thunderbolt (see Brit. Mus. Cat., Plate xxvi, 7). These pieces bear no date, but are furnished with the same monogram as the silver, namely, ⊕ or ⊕. The dated bronzes just described also have the two forms of monogram ⊕ and ⊕.

ANTIOCHUS IX. Third reign in Antioch, 109-108 B. C.

396 TETRADRACHM.

Obv. Diademed head of Antiochus IX, with slight beard, to r. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΦΙΛΟΠΑΤΟΡΟΣ (to l.). Athene, helmeted, standing to l., holds wreath-bearing Nike in outstretched r., holds spear in l., which she rests on shield; the whole surrounded by laurel wreath. On l., outside inscription, ⊕ | Α. On r., between figure and inscription, Ο.

London, no. 11, Plate XII; Petrograd, no. 714.

397 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ⊕ | Α. On r., between figure and inscription, Ρ.

Schulman, Dos Santos Coll., Sept., 1906, no. 4846 (Pl. ii).

398 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. On r., between figure and inscription, ≷.

Paris, no. 1476.

399 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. On r., between figure and inscription, KY.

Newell.

400 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. On r., between figure and inscription, Φ.

Paris, no. 1477 (Pl. xxvi, 9).

401 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. On l., between figure and inscription, Φ.

Glasgow (Hunterian Coll.), no. 10 (Pl. lxx, 4).

402 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. On r., between figure and inscription, Δ.

Newell.

403 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. On l., between figure and inscription, Φ.

London, no. 12; Glasgow (Hunterian Coll.), no. 9; Newell.

404 DRACHM.

Obv. Diademed head of Antiochus IX, as above, in dotted circle.

Rev. Inscription as on preceding coin. Winged Nike to l. holds wreath in outstretched r. On l., outside inscription, Φ | И.

Egger Sale xli, 1912, no. 752, **Plate XII**.

Modern historians[42] have generally considered this a period of enforced peace between the two antagonists, Grypus now ruling in the

[42] Among others, see Bevan, *loc. cit.*, vol. II, p. 255.

north, and Cyzicenus in Coele-Syria and Phoenicia. Our coins would seem to modify this supposition in so far as the cessation of hostilities will have to be placed as late as 108/107 B. C., at which time Grypus definitely secured Antioch and retained it until his death in 96 B. C. For we have the above series of tetradrachms which by style and monogram certainly belong to Antioch. The portrait, type, and inscription show the pieces to have been struck by Cyzicenus. In fabric and style they are the latest of his Antiochene issues *with the Athene type;* in style and fabric they are subsequent to the issues of Grypus' third reign (see Plate XI, nos. 388, 390), but certainly precede the fourth reign issues of the same ruler (Plate XII) as well as the last issues of Cyzicenus himself (Plate XII, nos. 414-5, 417-8). Sequence of style and fabric would therefore place them at just this juncture. In cor-

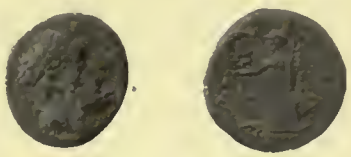


fig. 23

roboration of this dating we find a series of bronze coins of the fabric peculiar to Antioch (conformed to by all the bronze issues of this city since the first days of Antiochus VII Sidetes), with types, obverse, Bearded head of Herakles, reverse, Athene armed with helmet, spear and shield, standing to left. These coins all bear in the field the monogram ⅋ of the silver, and in the exergue the date ΓΣ (Glasgow, nos. 20 and 21). This entire coinage of silver and bronze coins falls, therefore, at some point between October 110 and October 109.[43]

If our conclusions are accepted — and it seems gratuitous to discard what appears to be clear and definite evidence furnished by our coins — there is revealed to us a period of rule by Cyzicenus in Antioch unrecorded in the confused and meagre historical notices of this period,

[43] Brit. Mus. Catalogue "Kings of Syria," p. 93, nos. 24 and 25 give the date ΕΣ. This date on no. 25 is very doubtful and is questioned by Gardner himself. Mr. G. F. Hill, in answer to my query and in spite of the difficulty due to war conditions, very kindly undertook to verify the dates on these two British Museum specimens. He reports that the date on no. 24 reads ΓΣ, on no. 25 ϚΣ. As the middle seriph is entirely lacking, and the lower seriph is very faulty we would seem to be justified in reading these dates ΓΣ as on the Glasgow specimens. It is to be remarked here that the series of bronze coins of Antiochus IX, obv. Bust of Eros, rev. Nike (type of B. M. Cat., nos. 27–30), bearing an almost unbroken series of dates running from Σ to ΑΙΣ could not possibly have been struck at Antioch, because Cyzicenus did not reign so many years in that city. They are rather to be attributed to Sidon.

that have survived to our day. On the other hand, this coinage and the dates of its issue very neatly explain an obscure point in a certain royal decree of this very period. I refer to the marble slab unearthed in the spring of 1887 in the ruins of the temple of Aphrodite at Paphos in Cyprus.[44] Upon the marble is engraved a transcription of a letter from Antiochus VIII to Ptolemy Alexander, and also another letter (very much mutilated) from the city of Seleucia in Pieria. The following is the royal letter as restored by U. Wilcken ;[45] the second letter is not reproduced because of its poor state of preservation.

[Β]ασιλεὺς Ἀντίοχος βασιλεῖ Πτολεμαίωι τῶι καὶ
[Ἀλ]εξάνδρωι τῶι ἀδελφῶι χαίρειν. Εἰ ἔρρωσαι, εἴη ἂν ὡς βου-
[λόμ]εθα, καὶ αὐτοὶ δὲ ὑγιαίνομεν καὶ σοῦ ἐμνημονεύομεν
[φιλο]στόργως. Σελευκεῖς τοὺς ἐν Πιερίαι τῆς ἱερᾶς καὶ ἀσύλου
[πάλαι] μὲν τῶι πατρὶ ἡμῶν προσκληρωθέντας καὶ τὴν
[παρ' αὐτ]ῶν εὔνοιαν μέχρι τέλους βεβαίαν συντηρήσαν-
[τας, ἐμμείνα]ντας δε καὶ τῇ πρὸς ἡμᾶς φιλοστοργίαι καὶ ταῦ-
[τα διὰ πολλῶ]ν καὶ καλῶν ἔργων καὶ μάλιστ' ἐν τοῖς ἔπει-
[τα ἀναγκαι]οτάτοις καιροῖς ἀποδειξαμένους καὶ κα-
[λῶς καὶ μεγαλ]οψύχως καὶ αὐτῶν ἀξίως ἐπαυξήσαντες
[εἰς μεῖζον πρ]οηγάγομεν ἀξίωμα, καὶ νυνὶ δὲ τῆς πρώ-
[της εὐεργ]εσίας καταξιῶσαι σπουδάζοντες
[ἐκρίναμεν εἰ]ς τὸν ἅπαντα χρόνον ἐλευθέρους
[εἶναι. Ἀκολούθω]ς αἷς ἐποιησάμεθα πρὸς ἀλλή-
[λους συνθήκαις, ὅ]πως καὶ πρὸς τὴν πατρίδα
[φιλόστοργον μέλλῃ] ἐκφανέστερον ἔσεσθαι,
[γράφω σοι, ////////a]κολουθῆς, καλῶς ἔχειν
[////////////////// Ἔρρω]σθε. Lγ Γορπιαίου κ[β].

We here see before us the copy of a letter from Antiochus VIII Grypus (as proved by Wilcken) to Ptolemy XI Alexander king of Cyprus informing the latter that autonomy had just been granted to the city of Seleucia in Pieria. The letter is dated in the month Gorpiaeos (August to September) of year 3. As Wilcken shows, we know from coins and other sources that Seleucia was granted this autonomy in the autumn of 108 B. C. When Antiochus wrote the letter this honor had just (*νυνὶ δὲ*) been decreed. Therefore the year 3 by which the letter is dated must refer to an era commencing in 111 B. C. (108 + 3 = 111). It was in this year that Grypus returned from his temporary exile at Aspendus, drove his brother Cyzicenus out of Antioch, and

[44] Journ. Hell. Stud., IX, 1888, page 229, no. 14.
[45] U. Wilcken in *Hermes*. XXIX (1894), page 436f.

once more seized the reins of government in that city. But the letter itself speaks of the honor decreed to Seleucia as having *only just* (*νυνὶ δὲ*) been given — that is, in 108 B. C.— and by its wording suggests that the immediate reason for the granting of this honor was the loyalty and friendship shown to Antiochus by the city in very recent times of great danger or trouble (*ἐν τοῖς ἔπειτα ἀναγκαιοτάτοις καιροῖς*). Wilcken himself[46] draws attention to the otherwise curious fact that three years had elapsed between the return of Grypus from Aspendus and the promulgation of the decree; and yet one would infer from the wording of the letter that the particular occasion which induced the granting of the honor had taken place quite recently. If now, as our coins would seem to show, Cyzicenus did succeed in once more driving Grypus out of Antioch (about 109 B. C.) and the latter in this strait was received by Seleucia, loyally supported by her inhabitants, and so enabled not long afterwards to regain Antioch, we would possess a full and very plausible explanation not only of the immediate reason for the granting of the honor of autonomy, but also for the date (108 B. C.) at which this was accomplished. Thus the decree and our coins, when taken together, reciprocally serve to explain and throw light upon each other.

ANTIOCHUS VIII. Fourth reign in Antioch, 108-96 B. C.

405 TETRADRACHM.

Obv. Diademed head of Antiochus VIII to r. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΕΠΙΦΑΝΟΥΣ (to l.). Zeus, legs draped, seated to l., holds wreath-bearing Nike (always to r.) in outstretched r., rests l. on sceptre; the whole surrounded by laurel wreath. On l., outside inscription, Ɛ | Α. Beneath throne, Δ or ⁂.

Newell, Plate XII; Newell (another); Petrograd, nos. 695, 696, and 697; Glasgow (Hunterian Coll.), no. 12 (Pl. lxix, 20); Coll. L. Walcher de Molthein, no. 3072 (Pl.xxix); London, no. 2 (Coins of the Ancients, Pl. 61); Paris, nos. 1433, 1434 and 1435; Jameson Coll., no. 1744 (Pl. lxxxviii); Egger Sale, Jan., 1908, nos. 648, 649, and 650 (Pl. xx); J. Ward Coll., no. 800 (Pl. xx); Hirsch, Weber Sale, no. 4127 (Pl.

[46] His actual words (*loc. cit.*, p. 444–5) are: "Jetzt aber, d. h. nach Obigem im Sommer des Jahres 108 v. Chr., hat er ihnen die vornehmste Wohlthat (*πρώτη εὐεργεσία*) erwiesen, indem er sie für ewige Zeit für 'frei' erklärt hat . . . . *Weshalb er gerade im Jahre 108 sich dazu entschlossen hat, wissen wir nicht.*" (The italics are mine.)

liv); Egger Sale xlv, 1913, no. 772 (Pl. xxi); Egger Sale xli, 1912, no. 746 (Pl. xx): Sotheby, Bunbury Sale, 1896, no. 589 (Pl. vi); Cumberland-Clark Sale, 1914, no. 285 (Pl. viii); Schulman, Dos Santos Coll., Sept., 1906, no. 4845 (Pl. ii).

406 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ꝑ | A. Beneath throne, A.

London, no. 1 ; Petrograd, no. 693.

407 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ꝑ | A. Beneath throne, ΠΓ.

London, nos. 3 and 4; Paris, no. 1431 (Pl. xxv, 9); Amer. Num. Soc.; Petrograd, nos. 690 and 691 ; Schulman, White-King Sale, 1904, no. 621 (Pl. vii); Egger Sale xlvi, 1914, no. 2469, **Plate XII**.

408 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ꝑ | A. Beneath throne, ΓΠ.

London, no. 5 ; Paris, no. 1432 ; Petrograd, no. 694.

409 DRACHM.

Obv. Similar head in circle of dots.

Rev. Similar inscription. Tripod. On l., outside inscription, Ꝑ | A.

London, no. 6 (Pl. xxvi, 4); Coll. L. Walcher de Molthein, no. 3054 (Pl. xxviii).

410 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ꝑ | Γ.

Newell ; Petrograd, no. 680 ; Glasgow (Hunterian Coll.), no. 13, **Plate XII.**

411 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ꝑ | Δ.

Glasgow (Hunterian Coll.), no. 14.

412 DRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ꝑ | P.

Petrograd, no 679.

413 HEMIDRACHM.

Obv. Head as on preceding.

Rev. Inscription as on the preceding. Winged Nike to l., holds wreath in outstretched r. On l., outside inscription, Ꝑ | A.

Glasgow (Hunterian Coll.), no. 17.

Aside from the evidence furnished by a natural sequence of style, the date of the appearance of this issue of tetradrachms, drachms and hemidrachms is fixed by the fact that it evidently served as the prototype for the autonomous coin issues of Seleucia in Pieria, first struck in 104 B. C. This city, for its steadfast loyalty to Grypus, was granted autonomy by him in 108 B. C. Comparing this date with the last year of Antiochus IX Cyzicenus' third reign in Antioch (coins dated ΓΣ and therefore struck before October of 109 B. C.), the inference becomes obvious that Seleucia stood loyally by Grypus in this his last period of exile from his capital and probably aided him to a great extent in recovering it. This therefore furnished him the real reason for granting the city its autonomy at this particular time.

Dr. Macdonald has already suggested the attribution to the Antiochene mint of the coins described above (nos. 405-413) because of their great similarity in every respect to certain bronze coins of autonomous type struck a little later than this time in that city (see Catalogue of the Hunterian Coll., vol. iii, p. 100).



fig. 24







fig. 25





fig. 26

Accompanying the series of three denominations in silver as described above, there was a further issue of three denominations in bronze (I) obverse, Diademed head of Grypus, reverse, Double cornucopiae; (II) Similar head, reverse, Tyche standing with cornucopiae and rudder; (III) Similar head, reverse, Rose. Unfortunately none of these are dated but all bear the monogram ꟻ exactly as found on the silver.

The sequence of types and style, as seen on our Plates XI and XII, is sufficient to prove correct M. Babelon's assignment of these coins to Antiochus VIII Grypus rather than to Antiochus XI as suggested by Gardner in the British Museum Catalogue. The fallacy of the latter's attribution was also seen and definitely refuted by J. Friedländer in the Zeitschrift für Numismatik, vol. VII, 1880, pp. 225-227.

ANTIOCHUS IX. Fourth reign in Antioch, 96-95 B. C.

Upon the murder of Grypus by his minister of war Heraclion, Antiochus IX Cyzicenus apparently was able to seize Antioch once more. His success was immediately challenged by Grypus' eldest son Seleucus who proclaimed himself king and in the following year was able to overthrow Cyzicenus. The latter either perished by his own hand in the final battle (according to Eusebius) or was captured and put to death by Seleucus (according to Josephus).

414 TETRADRACHM.

Obv. Diademed and beardless head of Antiochus IX to r. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΦΙΛΟΠΑΤΟΡΟΣ (to l.). Zeus, naked to waist, enthroned to l., holds wreath-bearing Nike in outstretched r., rests l. on sceptre. The whole surrounded by laurel wreath. On l., outside inscription, Ξ | Α Beneath throne, ⏃ or ⏃.

Sotheby, Bunbury Sale, no. 577, **Plate XII**; Paris, no. 1480 (Pl. xxvi, 10); Coll. L. Walcher de Molthein, no. 3057 (Pl. xxviii); Hirsch, Weber Sale, 1908, no. 4131 (Pl. liv); Newell.

415 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ξ | Α. On l., between figure and inscription, Η. Beneath throne, ⏃.

Newell, **Plate XII** (formerly Egger Sale xlv, 1913, no. 774); London, no. 5 (Pl. xxv, 1); Egger Sale, Jan., 1908, no. 654 (Pl. xx).

416 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ξ | Α. On l., between figure and inscription, Π. Beneath throne, ⏃.

Schulman, White-King Sale, 1904, no. 627 (Pl. vii).

417 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ξ | Α. Beneath throne, Π.

Jameson Coll., no. 1752, **Plate XII**.

418 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Ξ | Α. Beneath throne, Ν.

Newell, **Plate XII**.

419 DRACHM.

Obv. Similar head as above in dotted circle.

Rev. Similar inscription as on preceding. Tyche, with calathos, standing to l. holds rudder in r., cornucopiae in l. On l., outside inscription, Ⱥ | ΠΤ.

London, no. 15, Plate XII; Glasgow (Hunterian Coll.), nos. 11 and 12.

420 HEMIDRACHM.

Obv. Similar.

Rev. Similar inscription. Winged Nike to l. holds wreath in outstretched r. On l., outside inscription, Ⱥ.

Paris, no. 1481 (Pl. xxvi, 11); Newell, Plate XII.

Not only has there been some discussion as to when and where the above series was struck, but it has even been doubted[47] that it was issued by Cyzicenus. The portrait is unlike any other known one of Antiochus IX in that it is clean shaven.

Comparing the tetradrachms with those of the fourth reign of Grypus in Antioch and those of Seleucus VI (Plate XII) we see that because of style, fabric, and monograms the present series can only fall *between* the coins of those two sovereigns. The monogram ⏃ and the letter Π occur on the last coins of Grypus (nos. 405 and 407), while on the coins of Seleucus we find not only ⏃, but, in addition, the letter N which is to be seen beneath the throne on no. 418 (Cyzicenus) but not on any of Grypus' latest issues. These coins of Cyzicenus must belong to Antioch, as they are of identical fabric with this city's coinage under the preceding king as well as under the later kings. We have already found the monogram ⏃ used on the Antiochene issues in and from the time of Antiochus VII, while the letter A (which *may* denote the Antiochene mint) has accompanied the monogram of the supervising magistrate for Antiochus VII, VIII and IX. All these evidences combined place the coins in question at Antioch between the death of Antiochus VIII Grypus and the arrival in that city of Seleucus VI.

In looking closely at the portrait of Cyzicenus on these coins we recognize that although it is clean shaven, still it has a decidedly older look than the portrait on the issues of this monarch which we have studied under nos. 381-385, 386, 396-404. On these the features are not so heavy, the cheeks are thinner, and, in spite of the slight beard running around the curve of the jaw, there is an unmistakable air of youthfulness about it that is entirely lacking on the clean-shaven heads.

[47] See Bevan, *loc. cit.*, vol. II, p. 304, appendix V.

Cyzicenus, when he first secured possession of Antioch in the year 113 B. C., was a young man between twenty and twenty-five years of age, for we know that in 129 B. C. his mother Cleopatra had sent him to Cyzicus for his education. His features, with nascent beard, as they appear on his first coin issues at Antioch, resemble those of many a young Syrian of to-day. By 96 B. C. Cyzicenus was in his late thirties or early forties and, like the majority of modern Levantines, may well have grown gross and fleshy. In fact we know from our historians that he was a very heavy drinker, which would certainly, to a great extent, account for the changed features found on his last issues of the years 96 to 95 B. C. There is no reason to suppose that these coins, bearing as they do his characteristic inscription ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ ΦΙΛΟΠΑΤΟΡΟΣ are the issues of any other of the Seleucid kings than Antiochus IX Cyzicenus.

In speaking of the war which raged between Cyzicenus and Seleucus after the death of Grypus, Eusebius distinctly mentions the fact that Cyzicenus held Antioch.[48] Our coins undoubtedly show that Cyzicenus held Antioch almost immediately after the death of Grypus, and that some months must have elapsed before Seleucus was able to dispossess him. It may be to this period, when Cyzicenus found himself hard pressed by Seleucus VI and in great need of funds, that the story related by Clement of Alexandria (Protrept. 4, 52) is to be assigned, in which Cyzicenus caused a golden statue of Zeus in Antioch to be melted and replaced by one of gilt.



fig. 27

As usual there was also a coinage of bronze in addition to the silver. The types are, obverse, Beardless head of Cyzicenus to right, as on the silver, reverse, Zeus Nikephoros enthroned to left, in field the monogram $\frac{\text{E}}{\text{A}}$, and various symbols. For representations see Brit. Mus. Cat., Syria, Plate xxv, 4 (fig. 27), and Paris, Plate, xxvi, 15.

[48] Eusebius (Ed- Schoene) "Antiokhus vero Kizikenus exercitu collecto ex Antiokhia urbe, et praelio commisso devictus est. . . . . Universum itaque regnum ad Seleukum veniebat, et Antiokhiam obtinuit.

SELEUCUS VI. Ruled in Antioch, 95-94 B. C.

After a considerable struggle ending in a pitched battle Seleucus VI was enabled to vanquish his uncle Cyzicenus, and make good his own claim to his father's dominions in Syria.

a. With monogram ⊓.

421 TETRADRACHM.

Obv. Diademed head of Seleucus VI to r. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΣΕΛΕΥΚΟΥ (to r.) ΕΠΙΦΑΝΟΥΣ | ΝΙΚΑΤΟΡΟΣ (to l.). Zeus, naked to waist, enthroned to l., holds wreath-bearing Nike in outstretched r., rests l. on sceptre. The whole surrounded by laurel wreath. On l., outside inscription, Α | ⊓ | Α. Beneath throne, ⚓.

Newell, Plate XII (formerly Hirsch, Philipsen Sale, no. 2937); Glasgow (Hunterian Coll.), no. 7; Paris, no. 1513; Petrograd, no. 730; Sotheby, O'Hagan Sale, 1908, no. 700 (Pl. xi).

422 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Α | ⊓ | Α. Beneath throne, Α.

Newell, Plate XII.

423 TETRADRACHM.

Obv. Similar.

Rev. Similar.. On l., outside inscription, Α | ⊓ | Α. Beneath throne, Ν.

Egger Sale xli, 1912, no. 757 (Pl. xxi), same obverse die as Newell specimen of 421 (see Plate XII); Paris, no. 1512; Jameson Coll., no. 1756 (Pl. lxxxix); Egger Sale, Jan., 1908, no. 656 (Pl. xx), same obverse die as following no. 424, Newell specimen.

b. With monogram ⊬.

424 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ⊬ | Α. Beneath throne, C.

Newell, Plate XII (formerly Egger Sale xli, 1912, no. 755), same obverse die as Egger specimen catalogued under no. 423; Paris, no. 1511 (Pl. xxvii, 1); Newell.

425 TETRADRACHM.

Obv. Portrait of Seleucus VI slightly bearded.

Rev. Similar to preceding. On l., outside inscription, ⊬ | Α. Beneath throne, C.

Jameson Coll., no. 1757 (Pl. lxxxix).

426 DRACHM.

Obv. Similar head with slight beard, to r. *Rev.* ΒΑΣΙΛΕΩΣ | ΣΕΛΕΥΚΟΥ (to r.) ΕΠΙΦΑΝΟΥΣ | ΝΙΚΑΤΟΡΟΣ (to l.). Winged Nike to l. holds wreath in outstretched r. On l., outside inscription, Ꝑ | A. To r. of Nike, C.

Jameson Coll., no. 1758, **Plate XII**; Egger Sale xlv, 1913, no. 737 (Pl. xx).

427 DRACHM.

Obv. Bearded portrait to r. *Rev.* Similar to preceding but inscription omits title ΕΠΙΦΑΝΟΥΣ. On l., outside inscription, Ꝑ | A. On l., between figure and inscription, C.

Paris, nos. 1518 (Pl. xxvii, 3) and 1519.

428 HEMIDRACHM.

Obv. Similar to preceding. *Rev.* ΒΑΣΙΛΕΩΣ | ΣΕΛΕΥΚΟΥ (to r.) ΕΠΙΦΑΝΟΥΣ | ΝΙΚΑΤΟΡΟΣ (to l.). Double cornucopiae bound with taenia. On l., outside inscription, Ꝑ (perhaps Ꝑ | A?). To l. of cornucopiae, C.

London, nos. 5, **Plate XII**, and 6; Paris, no. 1520 (Pl. xxv, 4); Glasgow (Hunterian Coll.), nos. 8 (Pl. lxx, 9) and 9.

The Antiochene issues of Seleucus VI follow his predecessors' closely in both style and types. The coinage is divided into two series, each characterized by a special mint supervisor. ℕ of nos. 421 to 423 we have already met with in the first coinage at Antioch of Cyzicenus; Ꝑ is new to our studies. The A which accompanies the chief magistrate's monogram on all the coins of the previous few reigns is again found. Of the subordinates only C is new. That the ℕ and the Ꝑ series really emanated from one and the same mint is definitely proved by the fact that certain obverse dies are common to both. The latest



fig. 28



fig. 29

issues of the Ꝑ group comprise an issue of drachms and hemidrachms and are all characterized by the portrait of Seleucus showing a slight beard.

In addition to the silver coins there was also struck a bronze coinage of two denominations as follows: (I) Head of Seleucus, reverse, Apollo standing leaning against column (fig. 28); (II) Similar head, reverse, Tripod (fig. 29). The monogram ⊱ is found on all these pieces.

ANTIOCHUS X. Reign in Antioch, 94-92 B. C.

On the death of Cyzicenus, his grown up son, also named Antiochus, asserted his claim to the throne and declared himself king as Antiochus (X) Eusebes Philopator. Having gathered an army he attacked Seleucus in Antioch, was successful and drove him into flight. Antiochus X was now ruler in Antioch and here the following coins were struck in his name.

a. With monogram ⊠.

429 TETRADRACHM.

Obv. Diademed head of Antiochus X to r. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΕΥΣΕΒΟΥΣ | ΦΙΛΟΠΑΤΟΡΟΣ (to l.). Zeus, naked to waist, enthroned to l. holds wreath-bearing Nike in outstretched r., rests l. on sceptre. The whole surrounded by laurel wreath. On l., outside inscription, ⊠ | Α. Beneath throne, ⚠.

Newell, Plate XIII; London, no. 1; Egger Sale xlvi, 1914, no. 2474 (Pl. xl).

b. With monogram ⊱.

430 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, ⊱ | Α. Beneath throne, ⚠.

Egger Sale xli, no 759, Plate XIII; Newell; London, no. 2 (Pl. xxvi, 1); Jameson Coll., no. 1759 (Pl. lxxxix); Paris, nos. 1526, 1527 (Pl. xxvii, 7), 1528, 1529, and 1530; Petrograd, nos. 737, 738 (?), and 739 (?); Coll. L. Walcher de Molthein, no. 3070 (Pl. xxix); J. Ward Coll., no. 802 (Pl. xx) formerly Bunbury Sale (II), 1896, no. 588; E. Bourgey, Dr. Rousset Coll., April, 1908, no. 202 (Pl. vii).

431 DRACHM.

Obv. Similar head in dotted circle.

Rev. Inscription as above. Tyche standing to l. holds rudder in r., and cornucopiae in l. On l., outside inscription, ⊱ | Α.

Glasgow (Hunterian Coll.), no. 1, Plate XIII; Paris, no. 1531 (Pl. xxvii, 8).

432 HEMIDRACHM.

Obv. Similar head in dotted circle.

Rev. Inscription as above. Winged Nike to l. holding wreath in outstretched r., palm branch in l. On l., outside inscription, Σ | A.

Berlin (published by Dr. Macdonald in the Zeitschrift für Numismatik, 1912, vol. 29, Pl. v, 17).

The short rule of Antiochus X in Antioch was filled with constant warlike expeditions against the several surviving sons of Grypus in order to defend his own claim to the Syrian throne. Seleucus VI had, indeed, perished in a popular uprising at Mopsuestia in Cilicia whither he had fled after his disastrous battle with Antiochus X, but his two younger brothers, Antiochus and Philip, continued the struggle and were, with difficulty, defeated in 93 B. C. Eusebes, by his acts had aroused the enmity of Ptolemy Lathyrus of Cyprus, who now brought forward a fourth son of Grypus, Demetrius by name, and caused him to be crowned king in Damascus. In 92 B. C. with Demetrius advancing from the south, and Philip attacking from Cilicia in the north, the two brothers were together able to overthrow Antiochus X Eusebes who sought safety in flight to the Parthians.

The coinage of Eusebes in Antioch follows the model established by his immediate predecessors. We have two mint supervisors ⊠ and Σ, both with the usual accompanying A which letter, as remarked before, may either denote another magistrate or, perhaps with more likelihood, the Antioch mint. The subordinate ⚠ is still active.

There is also a series of bronze coins in two denominations: (I) Head of Eusebes as on the silver, reverse, Bonnets of the Dioscuri; (II) Head as before, reverse, Winged Nike. On these bronzes we find the monogram ꟾ|C (Brit. Mus. Cat., 6; Paris, no. 1532) already met with on



fig. 30



fig. 31

the coins of Seleucus VI, as also the monogram Σ of Eusebes' own silver issues.

ANTIOCHUS XI EPIPHANES PHILADELPHUS.

Ruled in Antioch for a few weeks in 93 B. C.

The tetradrachm described below proves that greater success attended the efforts of Grypus' two sons, Antiochus and Philip, to avenge the defeat of their oldest brother Seleucus VI at the hands of Antiochus X Eusebes than our classical sources would seem to suggest. The writings of our Greek and Roman historians, incomplete and contradictory as they are, speak only of a great battle fought outside of Antioch, in which the brothers were totally defeated by Antiochus X. The elder of the two, Antiochus XI, is said to have lost his life in attempting to escape after the battle by swimming across the Orontes. None of the writers definitely state that the brothers ever succeeded in actually entering Antioch and holding it, even for a short time. But the following coin now proves that not only did Antiochus Philadelphus capture Antioch in the first flush of his success, but that he was able to hold it long enough for its mint to strike at least a few coins in his name. The number certainly could not have been large as only one specimen is so far known to have come down to us, but it is sufficient to prove that the city did fall into the hands of Philadelphus, and that this must have taken place *previous* to the great battle in which he was defeated and eventually lost his life. His brother Philip made good his escape into Cilicia, from which he emerged not long afterwards to try conclusions once more with Eusebes.

433 TETRADRACHM.

Obv. Diademed head of Antiochus XI to r. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΕΠΙΦΑΝΟΥΣ | ΦΙΛΑΔΕΛΦΟΥ (to l.). Zeus enthroned to l., holds wreath-bearing Nike in outstretched r., rests l. on sceptre. The whole surrounded by laurel wreath. On l., outside inscription, Ⅱ | Α. Beneath throne, Δ.

Berlin, Plate XIII (published by Dr. Macdonald in the "Zeitschrift für Numismatik," 1912, vol. 29, Pl. v, 19).

This attribution, which would amplify if not correct certain statements of our classical sources, is not based on the mere interpretation of some complicated monogram. This latter form of historical "reconstruction" has most unfortunately been far too often attempted by

numismatists, particularly with Greek regal coinages, to the great satisfaction of the discoverer, but to the consequent detriment of the trustworthiness of the Science of Numismatics. If correctly and scientifically handled, there is no surer or more trustworthy aid to the history of these times than their coinages, but every sane historian rightly looks with suspicion on the "discoveries" made in the past by numismatists trusting in their ingenuity to convert monograms into mint names, and thereupon rewriting history. Lenormant was the arch type of this kind of archaeological numismatist, and his followers have been many. By this the implication is not intended to be conveyed that no monogram on a Greek regal coin *ever* denotes a mint, but that all monograms, apparently easy of solution into the name of some city, should be looked on with the greatest suspicion until by means of style, fabric, dies, types, and every device known to numismatists, their solution has been definitely proved. There are few such monograms in the Seleucid series.

In the present case the attribution of no. 433 to the mint at Antioch rests primarily on consideration of style and fabric. Comparing the coin with the Antiochene issues of Seleucus VI, Antiochus X, and Demetrius III, as shown on our plates, the striking resemblance between them all is unmistakable. In fact the obverses of nos. 433 and 422 are so similar that a second look must be taken to make sure that the dies are not identical. It is most probable that the same die cutter was used for both. Closely following the system of control at Antioch, our coin displays a supervisor's monogram in the field on the left between the inscription and the laurel wreath. Accompanying this monogram is the usual A of the coinages of Antiochus VII and all the later rulers from Grypus on. Under the throne is ⏃ the monogram of an official who for years has been the most active subordinate in our mint. Finally, as in the preceding issues of Antiochus X and the succeeding issues of Demetrius III and Philip, Antiochus XI is here given two



fig. 32

titles. Taken together, these evidences of the community of origin of the coinages of the above kings would seem to be clearly substantiated, and Antioch will have henceforth to be considered as one of the mints

of the short reign of Antiochus XI Philadelphus. Very probably the bronze coin published by Babelon in the Paris catalogue, Plate xxvii, 12, was also struck at Antioch. Its style and fabric resembles those of other bronze pieces issued here about this time, its reverse type — that of Athene with helmet, spear and shield — has often been employed at this mint, its issuing magistrate Φ is the same as on the silver tetradrachm.

Before leaving the rare coinage of Antiochus XI it must be emphasized that only the silver tetradrachm and the bronze piece here described can be attributed to Antioch. The comparatively common tetradrachms (a specimen of which is to be found on Pl. xxvii, no. 11, of the Paris catalogue) which have often been assigned to this Antiochus belong, as we shall soon see, to a later ruler. The rare but well known tetradrachm with the accolated busts of Antiochus XI and his brother Philip (Paris, Pl. xxvii, 13) is of sufficiently different style to make it absolutely impossible to assign it to our mint.

DEMETRIUS III. Reigned in Antioch circa 92-89 B. C.

The exact space of time that Demetrius reigned in Antioch is somewhat doubtful. From the confused and incomplete chronicles of these times we gather that in and around 92 B. C. the allied forces of the two brothers, Demetrius and Philip, temporarily drove Antiochus X out of all Syria. In 89 B. C. we find Philip and Demetrius themselves at war, with Demetrius besieging his brother in Beroea. The latter now called in to his assistance the Arab chieftain Azizos as well as Mithridates a Parthian governor. Demetrius in turn was surrounded by these superior forces, his water supply cut off, and eventually forced to surrender. Appian definitely states that the Antiochenes in his army were allowed to return home unmolested and that Philip, shortly afterwards, entered Antioch and was received with joy by the populace. It is evident, therefore, that Demetrius ruled in Antioch until the disaster that overtook him before Beroea sometime before 88 B. C.

In the year from October 92 to October 91 B. C. the municipality of Antioch commenced striking a series of bronze coins of two denominations inscribed ΑΝΤΙΟΧΕΩΝ ΤΗΣ ΜΗΤΡΟΠΟΛΕΩΣ and dated according to the Seleucid Era.[49] Evidently Demetrius had been forced to grant

[49] G. Macdonald, Greek Coins in the Hunterian Collection, Vol. III, pp. 143-144.

the city a certain amount of local autonomy in order to attach her the more to his side in case of a possible struggle with his brother. Whereas Seleucia had always been noted for her steadfast loyalty to the interests of the legitimate Seleucid ruler, Antioch seems ever to have favored the one not actually ruling within her walls. Again this was probably the case, for when Philip did eventually triumph, our historian takes the pains to state that he was joyfully received by the people of Antioch. The series of autonomous bronze coins just mentioned continues to appear alongside of the royal issues until towards the close of the reign in Antioch of Tigranes. The last date we possess is ΜΣ or 73/72 B. C.

The royal issues of Demetrius for his Syrian capital are the following.

434 TETRADRACHM.

Obv. Diademed head of Demetrius III to r. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΔΗΜΗΤΡΙΟΥ (to r.) ΦΙΛΟΜΗΤΟΡΟΣ | ΕΥΕΡΓΕΤΟΥ (to l.). Zeus, naked to waist, enthroned to l., holds wreath-bearing Nike in outstretched r., rests l. on sceptre. The whole surrounded by laurel wreath. On l., outside inscription, Ω | Π | Α. Beneath throne, ⏃.

Petrograd, no. 761.

435 TETRADRACHM.

Obv. Similar, but portrait is bearded.

Rev. ΒΑΣΙΛΕΩΣ | ΔΗΜΗΤΡΙΟΥ | ΘΕΟΥ (to r.) ΦΙΛΟΠΑΤΟΡΟΣ | ΣΩΤΗΡΟΣ (to l.). Zeus seated as on previous coin. On l., outside inscription, Ν | Α. Beneath throne, ⏃.

Paris, no. 1570, Plate XIII; Coll. L. Wâlcher de Molthein, no. 3078, Plate XIII.

Here the supervising magistrates are Ω | Π and Ν, with, in each case, the usual Α in accompaniment, as well as the ⏃ of previous reigns. For the bronze issues we have two pieces described in the Paris collection (nos. 1574 and 1575) which seem to belong here. They have for their obverse type the head of Demetrius as on no. 435, for reverse a standing Hermes; while one of the monograms found on them is the ⏃ of the tetradrachms. The titles given to Demetrius on these particular bronzes are identical with those found on the tetradrachm no. 435.

PHILIP PHILADELPHUS.

Reigned in Antioch, 89-83 B. C.

a. With N.

436 TETRADRACHM.

Obv. Diademed head of Philip to r. Fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΦΙΛΙΠΠΟΥ (to r.) ΕΠΙΦΑΝΟΥΣ | ΦΙΛΑΔΕΛΦΟΥ (to l.). Zeus, naked to waist, seated to l. on throne, holds wreath-bearing Nike in outstretched r., rests l. on sceptre. The whole in laurel wreath. On l., outside inscription, N | A. Beneath throne, ⚠.

J. Ward Coll., no. 803, **Plate XIII** (formerly Bunbury Sale (II), no. 591).

b. With Φ and letter in field.

437 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. Beneath throne, ⚠.

London, nos. 1, 2, and 3; Sotheby, O'Hagan Coll., 1908, no. 700, **Plate XIII**; Newell (two specimens); Paris, nos. 1546 (Pl. xxvii, 14) and 1547; Petrograd, no. 746; Roll. & Feuard. Sale, June, 1913, no. 338 (Pl. xi).

438 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. On l., between figure and inscription, Δ. Beneath throne, ⚠.

London, no. 8.

439 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. On l., between figure and inscription, H. Beneath throne, ⚠.

London, no. 9; Jameson Coll., no. 1762 (Pl. xe); Newell.

440 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. On l., between figure and inscription Θ. Beneath throne, ⚠.

Glasgow (Hunterian Coll.), no. 2; Petrograd, no. 757.

441 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. On l., between figure and inscription, N. Beneath throne, ⏃.

London, no. 10, Plate XIII ; Paris, nos. 1554 (Pl. xxvii, 16) and 1557 ; Petrograd, nos. 753 and 754 ; Newell ; Glasgow (Hunterian Coll.), no. 3.

442 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. On l., between figure and inscription, O. Beneath throne, ⏃.

Paris, no. 1558.

443 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. On l., between figure and inscription, Φ. Beneath throne, ⏃.

London, no. 11 ; Paris, no. 1559.

c. Similar, but with letter in exergue.

444 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. Beneath throne, ⏃. In exergue, Δ.

Glasgow (Hunterian Coll.), no. 8.

445 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. Beneath throne, ⏃. In exergue, Λ.

Petrograd, no. 748.

446 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. Beneath throne, ⏃. In exergue, M.

Newell.

447 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. Beneath throne, ⏃. In exergue, N.

Glasgow (Hunterian Coll.), no. 9 ; London, no. 15 ; Paris, no. 1555.

448 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. Beneath throne, ⏃. In exergue, Π.

Glasgow (Hunterian Coll.), no. 10; Egger Sale, Jan., 1908, no. 663, Plate XIII; Petrograd, no. 755; London, no. 16; Newell; Sotheby, Guzman Coll., 1914, no. 120 (Pl. vii).

449 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. Beneath throne, ⏃. In exergue, Σ.

Paris, no. 1548; London, no. 4; Newell.

450 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. Beneath throne, ⏃. In exergue, T.

Glasgow (Hunterian Coll.), no. 11; Petrograd, no. 747; Newell.

d. With letters in field and exergue.

451 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. On l., between figure and inscription, A. Beneath throne, ⏃. In exergue, H.

London, no. 12; Paris, no. 1560; Glasgow (Hunterian Coll.), no. 12.

452 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. On l., between figure and inscription, ⍓. Beneath throne, ⏃. In exergue, H.

London, no. 13; Paris, no. 1561 (Pl. xxvii, 17); Glasgow (Hunterian Coll.), no. 6.

453 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., outside inscription, Φ | A. On l., between figure and inscription, I. Beneath throne, ⏃. In exergue, Θ.

London, no. 14.

e. Presence of Φ | A doubtful, monograms in field and exergue.

454 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, Φ. Beneath throne, ⏃. In exergue, AΓ.

Glasgow (Hunterian Coll.), no. 15.

455 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, 𐤊. Beneath throne, ⏃. In exergue, ΓΓ.

Glasgow (Hunterian Coll.), no. 14.

456 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, 𐤊. Beneath throne, ⏃.

Paris, no. 1552.

457 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, Ш or ⍵ | 𐤊. Beneath throne, ⏃. In exergue, AN.

Paris, no. 1553; Coll. E. Rogers (Num. Chron., 4th Ser., 1912, Pl. xi, 9).

458 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, 𐤊. Beneath throne, ⏃.

J. Ward Coll., no. 804, **Plate XIII.**

459 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., between figure and inscription, ΔH | O | M | ЄP. Beneath throne, ⏃. In exergue, ?.

Paris, no. 1562.

Owing to the lack of a sufficient number of coins, casts, or reproductions, the issues of Philip have not been worked out as thoroughly as the writer would have desired. Therefore only groups a, b, c, and d can with confidence be assigned to Antioch, because they seem to embody most of the characteristics peculiar to the Seleucid coinage struck in this city during the last few decades of that dynasty's rule. The coins of group 'e' are much more doubtfully assigned to our mint.

To take up these groups in detail, it can readily be appreciated that group 'a' must have followed closely upon the rare coins of Demetrius

III struck at Antioch. The mint supervisor N is continued from these to the coin struck in Philip's name, as is also his assistant ⚠, while the letter A is likewise to be seen in its accustomed position. Above all, style and fabric remain the same. N did not long retain his office but was shortly replaced by Φ who seems to have remained supervisor so long as this office continued to be designated on the coins,—in other words, throughout groups 'b,' 'c,' and 'd.' The style and execution, as well as the weight, rapidly deteriorates in the course of these issues. The flans on which the coins are struck now grow so small in diameter that the letters Φ | A are, more often than not, entirely off the coin, or, when they can be distinguished on the very edge of the piece, they appear so inextricably tangled up with the leaves of the surrounding laurel wreath that it is difficult to distinguish them. Particularly is this now the case, because through crude workmanship and the mechanical deterioration of the design, these letters have degenerated into something like ⊦ | A or ⊦ | ‖. By the time group 'e' is reached it seems probable that Φ | A has disappeared altogether. At least, the few specimens that the writer has been able to inspect, either have this part of the design entirely off the flan or show only a few meaningless lines which may have been intended for leaves. This, however, is a surmise only and we may really have to do with the letters Φ | A in their crudest and most degenerate form. Even though group 'e' does not show Φ | A it still remains probable that it was struck at Antioch as its style, though poorer and with a more stereotyped reverse, has still much in common with that of groups 'a'—'d.' Above all, the monogram ⚠ continues to occupy its old position beneath the throne of Zeus and would therefore seem to indicate that we have to do with an Antiochene issue.

Mention, at least, should here be made of another large and important series of tetradrachms bearing the name of Philip. This series is characterized by the monogram ⚒ or ⚒ to be seen in the field, and the numerical letters Γ, Δ, H, ΒΙ, ΘΙ, Κ, ΚΑ, ΒΚ, ΚΔ, ΣΚ, ΙΚ, ΗΚ, ΘΚ in the exergue. These coins are all of a peculiar style which differs widely from that found on the remainder of Philip's issues. The portrait, too, is unlike that exhibited by the coins we have just been studying. The alphabetical numbers probably represent dates, for if they had been used as serial numbers to designate successive issues of coin, every one from A to ΘΚ would have been employed. This would not necessarily have been the case if the numbers denote years, regnal or otherwise.

Therefore, because only certain numbers are represented in the series in question,— although the actual coins of this series that have come down to us are comparatively common,— these numbers must be considered as representing dates. Now, if these are therefore accepted as being dates, either of regnal years or of some era yet to be determined, the coins which bear them cannot possibly have been struck at Antioch *at this time*, for Philip is known to have reigned here not longer than from circa 89 to 83 B. C.

The question of the true mint and date of this peculiar series is most interesting— but the solution is both complicated and lengthy and for that reason has here been deferred until a more propitious occasion. Besides, the present article is intended to deal only with Seleucid coins attributable to the Antiochene mint from the last years of Seleucus II to the transformation of Syria into a Roman province by Pompey in 64 B. C.

To return to the issues which we can feel reasonably sure were struck by Philip in Antioch, it is most noticeable that unlike the issues of all previous kings in this city there are absolutely no bronze coins of regal types to accompany the silver. This is, however, abundantly accounted for by the fact that, commencing with the two hundred and twenty-first year of the Seleucid Era (92/91 B. C.), a large series of autonomous bronze coins, composed of two denominations, appears at Antioch and continues until the two hundred and fortieth year (73/72 B. C.). The style and fabric exhibited by these latter pieces which, as the inscriptions they bear explicitly state, were struck by the Municipality of Antioch, resemble in the closest manner those of our tetradrachms bearing the name of King Philip. Thus they furnish an additional proof that Antioch must also have been the mint of the contemporaneous royal silver issues we have just been studying. These civic issues being plentiful, there was now evidently little need of striking bronze coins with royal types.[50]

To maintain his position at Antioch, Philip was forced to wage constant wars, first against his own brother, Demetrius III, then against Antiochus X who had escaped from or been sent back by the Parthians, later against Antiochus XII the son of Demetrius, and lastly against Tigranes the powerful king of Armenia whom the people of Syria, wearied at last with the endless fratricidal wars, called in to free them. Philip was driven from Syria and is supposed to have perished; Tigranes henceforth ruled at Antioch in his stead.

[50] See Macdonald, Catalogue of the Greek Coins in the Hunterian Collection, Glasgow, vol. iii, pages 143, 144.

TIGRANES I OF ARMENIA,

Ruled in Antioch 83-69 B. C.

Although, logically, the Antiochene issues of Tigranes fall into place between those of Philip and of Antiochus XIII they have nevertheless been omitted here because they have already been so carefully and satisfactorily handled by Dr. Macdonald[51] that nothing new could be added to his researches, and also because, while struck at Antioch and therefore partaking generally of the style and fabric of the Seleucid issues, they are yet the coinages of an alien king and our interests here are primarily centred only on those of the Seleucid princes.

A typical example of the series of tetradrachms struck by Tigranes during his rule in Antioch is given on Plate XIII (A).

ANTIOCHUS XIII, Ruled in Antioch circa 69-65 B. C.

We have still to consider the probable coinages at Antioch of the last of the Seleucid kings actually ruling in that city—Antiochus XIII, nicknamed Asiaticus. That he did strike coins seems to the writer probable almost beyond discussion. Antioch, the metropolis of Syria and one of the largest and most important cities of the East, had possessed an active mint for about two centuries. Her coinages had been both continuous and unusually prolific. Antiochus XIII was king by right of descent, by acknowledgement of the Syrians themselves (Appian, Syr. 49), and finally by solemn consent of Lucullus (Just. xl, 2, 3) who had recently forced Tigranes out of Syria. Syria was not definitely made a Roman province until the coming of Pompey and was therefore still an independent state and in a position to issue its own money. Why then have numismatists found it so difficult to satisfactorily assign any coins to the thirteenth Antiochus when everything would point to the fact that he must have issued such? The answer evidently is that numismatists have not made themselves sufficiently acquainted with the true sequence and style of preceding Antiochene issues and have therefore committed the unfortunate error of assigning to Antiochus XI the following coins which by style, fabric, and inscription can only belong to the time of Antiochus XIII.

[51] Num. Chron., Ser. IV, vol. ii, 1902.



fig. 33

460 TETRADRACHM.

Obv. Diademed head of Antiochus XIII to r. in fillet border.

Rev. ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ (to r.) ΦΙΛΑΔΕΛΦΟΥ (to l.). Zeus, naked to waist, seated to l. on throne, holds wreath-bearing Nike in outstretched r., rests l. on sceptre. The whole in laurel wreath. On l., in front of Zeus, ⋈.

Newell (fig. 33); Paris, no. 1538 (Pl. xxvii, 11); Rev. Edgar Rogers, Num. Chron., Ser. IV, vol. xii, 1912, p. 363, no. 32 (Pl. xi, 10); Egger Sale xli, 1912, no. 761 (Pl. xxi); Egger Sale xlv, 1913, no. 741 (Pl. xx).

461 TETRADRACHM.

Obv. Similar.

Rev. Similar. On l., in front of Zeus, ⋈. Beneath throne, P.

Newell, **Plate XIII**; Egger Sale xlv, 1913, no. 777 (Pl. xxi); Jameson Coll., no. 1760 (Pl. lxxxix).

We have already had occasion (page 117) to note that these coins cannot possibly, as some authorities have suggested, be assigned to Antiochus XI. The true Antiochene issue of that king is found in no. 433, Plate XIII. Our two coins (nos. 460 and 461) are of a much later style and fabric as shown most clearly by the low relief, poor drawing, closely packed letters, and the absence of the usual monogram and letter A outside the inscription. In these respects our two coins are midway between the later issues of Philip Philadelphus (nos. 454-459) and the posthumous issues of that king characterized by the monograms ⋈ and ⋈. The true issues of Philip came to an end with his death in 83 B. C. The issues of Tigranes evidently commenced in and around that same year when the Armenian king had finally secured Antioch, and continued until his evacuation of Syria before the threatening advance of Lucullus. In a forthcoming number of the Numismatic Chronicle the writer will show that the above mentioned posthumous issues of Philip took place under Roman dominion or, in other words, after the constitution of Syria as a Roman province. The only possible occasion therefore, between these two groups of Philip

coins, to which our pieces with their Antiochus inscription could possibly be assigned is the reign of Antiochus XIII. This assignment is thoroughly corroborated by the style and fabric of our two tetradrachms. We should notice the same small flans, the rather poor character of the silver used, the very low relief, the flat, thin style of the portraiture, the clumsily made letters so characteristic of the later issues both contemporary and posthumous, which bear the name of Philip as well as those which bear the names and types of Tigranes. Like nos. 454-459 a monogram appears in the field immediately in front of Zeus, while the monogram and accompanying mintmark A, always placed on the left outside the inscription on the Antiochene issues of the Seleucid rulers from Grypus to the first years of Philip, are absent. Stylistically therefore our pieces come after rather than before the reign of Philip. Every detail of their technique is purely and only characteristic of the Antiochene coinages of this period. As our coins bear the name of Antiochus it is obvious that they can only be attributed to a king of that name. Their late style precludes their being assigned to Antiochus XI. Furthermore, to judge from the number of specimens that have come down to us, the original size of their issue must have been quite large, which fact would not at all harmonize with the very short period of time during which the eleventh Antiochus could possibly have held Antioch. Neither can they be given to Antiochus XII, first because his official titles were Dionysus Epiphanes Philopator Callinicus while the title appearing on our coin is Philadelphus; secondly because he only ruled in and around Damascus while the style and fabric of nos. 460 and 461 clearly show that these coins must have been struck in the mint of Antioch.

Antiochus XIII, according to Pauly-Wissova (the best available historical sketch of this prince based on a careful and critical analysis of the obscure and often erroneous statements of ancient historians) was the son of Antiochus X Eusebes and the Egyptian princess Cleopatra Selene. He spent his youth in Asia Minor (whence his nickname Asiaticus) until about 75 B. C. when he went to Rome accompanied by his younger brother. Cicero (Verr. IV, 27, 28, 30) mentions their sojourn in Rome and their experiences at the hands of the unscrupulous Verres when the brothers stopped over in Sicily on their way back to the East. After Tigranes had been forced to evacuate Antioch (69 B.C.) Antiochus, who was now a young man, put himself forward and was gladly received as ruler by the Syrians (Appian, Syr. 49). After Lu-

cullus had won the decisive battle near Tigranocerta (Oct. 6th, 69 B.C.) he confirmed Antiochus as king of Syria. His reign however was very troubled. While engaged in an unsuccessful campaign against the Arabs (Dio Cassius states, XXXVI, 19, 3, that in 67 B. C. the Antiochenes were fighting Arabs) the people of Antioch revolted. The uprising was suppressed but the ringleaders managed to escape to Cilicia where they put forward as rival king the son of Philip Philadelphus also called Philip. Azizos, the Arab chieftain, immediately declared for the latter but Antiochus secured the assistance of Sampsigeramus the rival chieftain of Emesa. In a very short time the Arab leaders had come to an understanding between themselves and together plotted to do away with both the Seleucid princes and divide Syria amongst themselves. In pursuance of this Antiochus was actually seized by Sampsigeramus. At this juncture Pompey, now commander-in-chief of the Roman armies in Asia, arrived (64 B. C.). To him Antiochus appealed for assistance and begged him to reinstate him in his kingdom. Pompey had other ideas and as the people themselves appeared very loath to have Antiochus back again (Just. XL, 2, 3) he decided to form Syria into a Roman province. Not long afterwards Antiochus XIII was murdered by the Arab chieftain Sampsigeramus.

The two tetradrachms, which we have seen can only be assigned to Antiochus XIII, are valuable historically as they afford us a definite record of that ruler's official title. Hitherto modern writers have concluded that Antiochus' title was probably Eusebes from the fact that Justin, Porphyry, and Appian have all confused him with his father Antiochus X surnamed Eusebes. This conclusion is perhaps well founded, but our coins show further that his principal[52] title was undoubtedly Philadelphus — assumed probably in honor of the brother with whom he undertook the eventful but, in the end, unsuccessful mission to Rome.

Antiochus XIII was the last of the Seleucid princes ruling in Syria — as Appian expressly states (b. c. V. 10, Syr. 70). With his coins we have also reached the end of the long, varied, and therefore unusually interesting series which bears the names, portraits, and types of such scions of the House of Seleucus, or base pretenders to that proud name, as held sway in their great capital at Antioch.

[52] Seleucid princes, ever since the reign of Antiochus IV, were given to the habit of assuming several titles. Antiochus XII boasted of no less than four.

RÉSUMÉ

COINAGE AND MINT.

In the preceding pages we have studied the coinage of our mint, ruler by ruler. A more general treatment of the coinage as a whole may not be out of place in order that we may secure a general perspective of the issues, that we may see how they connect the one with the other, and why they should be assigned to Antioch.

Under Antiochus III we have found a coinage of gold oktadrachms and staters, silver tetradrachms and drachms, which fall naturally into three series corresponding more or less closely to the three main phases of that ruler's life: (I) the early years of his reign, (II) the eastern expedition, (III) his Phoenician conquests and the war with Rome. Series I we found growing immediately out of the issues of Seleucus II and III and bound with them by the common monograms ⌘ and ⌘. The portrait of Antiochus is that of a young man, the time limit easily contained in the space of some seventeen years during which he grew from a youth of eighteen to a man of about thirty-five. The latter part of this series is made conspicuous by the sudden introduction of a fillet border decoration in the place of the older beaded border. Series II continues this same fillet decoration, the magistrate ⌘ is no longer active, but ⌘ is there to prove that Series II is but the continuation of Series I and therefore from the same mint, as Dr. Imhoof-Blumer has already pointed out. Attention should be called to the peculiar custom of placing the fillet border only on the tetradrachms, coins of smaller module, such as gold stater and silver drachm, still bearing the beaded border. The portrait of Antiochus on this series is that of a somewhat older man. There now follows Series III bearing the head of Antiochus III but with features showing advancing age. In style, however, these are but the continuance of the previous issues.

Under the son and successor of Antiochus III the coinage follows closely the style and fabric of the latter's third series and therefore undoubtedly was struck in one and the same mint.[53] We have already had occasion to observe that of all Antiochus III's many coinages the one here brought together is the largest, also the most consecutive in types

[53] The writer has only now become aware that Dr. Macdonald in his catalogue of the Hunterian Collection in Glasgow, vol. iii, p. 31, has already made this observation, and furthermore suggests that we should look for this common mint at Antioch. It certainly gives me great pleasure to make the discovery that our observations, arrived at separately, tally so exactly.

of portraiture — from the smooth-faced youth of the earliest coins of Series I, through the early manhood and middle age of Series I and II, to the features sharpened and seamed by arduous campaigns and the troubles of a particularly active and vicissitudinous life, as portrayed on his last issues. In a similar, though smaller, way the issues here studied of Seleucus IV are the largest and at the same time most homogeneous of his none too numerous coinages. Considering these points together, only Antioch, the capital and the commercial as well as political centre of the empire, can possibly be thought of as a location for the issuing mint.

This coinage of Seleucus IV merges easily into that of his successor Antiochus IV. On this we see not only the head of Antiochus himself but also that of his little son of like name, a mere child of not more than two years of age. The magistrate ⏃ serving under Seleucus IV as well as under Antiochus IV, is definite proof of the connection between the two issues. Towards the middle of Antiochus IV's reign the flans upon which his coins were struck show a tendency to grow broader and thinner, while various titles are added to his name. Introducing his last issue and closely conforming to it in style, fabric, and inscriptions, comes the interesting and special series with the Zeus Olympios and Apollo Kitharoedos types. The close connection between these coins and the famous celebrations held at Daphne is too obvious to be further insisted upon here. Because of this it will hardly be denied that the coins themselves could only have been struck at Antioch.

The ordinary coinage of Antiochus IV was followed by an exactly similar one issued in his son's name, many of the same magistrates officiating. Closely linked by the same monograms comes the coinage of Demetrius I who succeeded Antiochus V. In the seventh year of Demetrius' reign, or the one hundred and fifty-eighth of the Seleucid Era, a reform was made in the visible control of the coinage. Heretofore, as a rule, only one magistrate signed each reverse die, no matter how many such officials chanced to be in office at the same time. This is very neatly illustrated by our nos. 99, 100, and 101. The magistrates who signed these three coins were in office together, as can be judged by the scarcity of these varieties, the appearance on all three of the title Σωτήρος which, together with the three monograms, is carried on to the immediately succeeding issues. At this point comes the reorganization of the control, and, henceforth, we find on all the silver

coins of Demetrius a date reckoned according to the Seleucid Era, a controller 🜲 who signs every coin, and numerous subordinates, one of whom places his monogram on the reverse below that of the controller's.

Alexander I, on his issues, retains this system of dates as well as the supervising and subordinate magistrates. While the former are frequently changed, the latter often continue from reign to reign. This fact, backed by considerations of style and fabric, is of the greatest assistance when it comes to finally determining what is or is not to be considered an issue of our mint.

Demetrius II strikes coins of similar style and signed by many of the same magistrates as Alexander's issues, but as he held Antioch for only two years his Antiochene coinage naturally bear only the two dates ΖΞΡ and ΗΞΡ. Though driven out of the capital, Demetrius II still retained the major portion of his kingdom and continued to strike in his remaining mints. But here is to be noted the significant fact that his coins of the type, which for other reasons we would assign to Antioch, now cease. In other words, they are found only with the dates of the very two years during which our historical sources claim that he actually ruled in Antioch. This would seem to be proof positive that our deductions are soundly based and that Antioch really was the mint of our entire series. Furthermore, we gather from our historians that the king who followed Demetrius, namely Antiochus VI, held sway only in the Orontes valley, and so it is no surprise to find that his coinage consists only of pieces displaying the style and fabric which we have now come to associate with Antioch. The dates follow immediately upon those of his predecessor, while many of the magistratal monograms are common to both reigns.

Unfortunately the custom of dating the silver coinage at Antioch is finally dispensed with in the following reign,— that of Tryphon.

Antiochus VII, for his very large coinage, employs only one controller 🜸 until, in the last year of his reign, 🜸 retires and others take his place. During his term of office 🜸 was assisted by many subordinates, among whom were several who, in their turn, were accompanied by still lower officials. On one coin, therefore, we will find the controller's mark 🜸, his subordinate Α or Τ, and, in addition, a series of other letters or monograms which must denote the names of lesser magistrates. Furthermore, on *all* these coins the letter Α is constantly present, is always to be found beneath the controller's monogram,

and may, not improbably, denote the mint Antioch. I would not insist on this except for the fact that after the two following reigns of Demetrius II (2nd term), and Alexander II the A makes its reappearance, and is henceforth found on all the tetradrachms struck at our mint until the fall of the Seleucid kings and the accession of the Armenian Tigranes. Besides, this A is always found in the same place, namely beneath the monogram of the supervising magistrate. As it occurs in the reigns covering the years 138 to 129 B. C. and 121 to 83 B. C. its interpretation as a magistrate's initial is hardly possible unless we are willing to suppose that more than one official whose name commenced with this letter occupied the constant post of chief assistant to the controller. For though the supervisor was continually being changed throughout this length of time, the letter A is always found occupying its accustomed position beneath the latter's monogram. It therefore occurs unfailingly on all the coins which by style, fabric, sequence of type or magistratal monogram we would, under any circumstances, have assigned to Antioch.

From the time of Antiochus VII to the end of the dynasty the Antiochene mint was kept busy striking new coin for the rapidly alternating or changing rulers. As outlying provinces fell away in the general break-up of the kingdom, or as autonomy was granted (usually perforce of circumstances) to the various large cities of the land, nearly all of whom had in by-gone days been greater or lesser royal mints,—such as Seleucia on the Orontes, Tripolis, Sidon, Tyre, Ake-Ptolemais and others—Antioch became practically the sole remaining place in all the land where coins could still be struck in the name of that person who,—even for a short while,—could rightfully claim the once proud title of Seleucid king. When furthermore we find that the great majority of the coins bearing the portraits and names of Antiochus VIII, IX, Seleucus VI, Antiochus X, XI, Demetrius III, and Philip Philadelphus are all of one style, one fabric, one type, and show one uniform system of mint control, then it is clearly only to Antioch that these coinages can possibly be assigned. For, as stated above, it is only Antioch that at this time possessed a sufficiently large *royal* mint, was the only important commercial city directly under Seleucid authority, and, lastly, was the only city in which *all* these princes ruled at one time or another. Seeing then that this uniform coinage of the last seven kings could only have been struck at Antioch, and that the issues of the intervening rulers Demetrius II (2nd reign), Alexander II, Cleopatra and

the early series of Antiochus VIII form an unbroken bridge in style, fabric, and monograms between the latter and the issues of Antiochus VII back, we then become assured that this great and homogeneous coinage from the days of Seleucus II to the arrival of Tigranes must have been struck in the capital and metropolis of the Seleucid Empire, —Antioch on the Orontes.

Types. There is not room here to discuss in detail the numerous and important types which make the reverses of the Seleucid coinage of such greater value and interest than, for instance, the Ptolemaic with its everlasting eagles and cornucopiae. The types of gold, silver and bronze have been touched on in our text wherever they chanced to prove of particular interest and importance to our subject. For a more thorough and valuable treatment, the reader is referred to M. Babelon's introduction to the Paris catalogue 'Les rois de Syrie, d'Arménie et de Commagène.' A brief survey is all that is here necessary.

The very first type of all the Seleucid coinage was that of Zeus Olympios as borrowed from the coinage of Alexander the Great. Shortly afterwards, still in the reign of Seleucus I, the eagle which the god holds in his right hand was exchanged for a wreath-bearing Nike, thus making the type conform more closely to its prototype, the great chryselephantine statue of the god at Olympia. But during the long rule of the House of Seleucus many other types arose and enjoyed predominant popularity for a space of time. It was not until the fourth reign of Grypus in Antioch (circa 107-96 B. C.) that Zeus Olympios triumphs over his numerous rivals and remains the constant reverse type of the Antiochene tetradrachms until the coming of Tigranes. The struggle for popular favor had indeed been one of long duration and many vicissitudes. Displaced by Apollo, the patron god of the Seleucid family and the predominant type at the time our study commences, Zeus Olympios Nikephoros once more comes into favor in the reign of that brilliant but erratic man, Antiochus IV Epiphanes, and thenceforth vies with Tyche, Apollo, the Dioscuri, Athena, and Zeus Uranius for the honor of being chosen for the reverse type on the tetradrachms. But finally, as if in mockery, Zeus Olympios Nikephoros having graced the coinage of Seleucus I Nikator whose realm stretched from the Propontis across Asia Minor, Syria, Mesopotamia, Persia, to the distant plains of Central Asia and the broad rivers of Northern India, now for the last time lends dignity in its fallen state to a debased and ugly coinage struck by the degenerate and wrangling de-

scendants of the first Seleucus that now ruled only in a small province embracing little more than the valley of the Orontes. Tigranes put a temporary end to this coinage and introduced in its stead a type of purely local significance, but more worthy of the proud city of Antioch, still destined to remain, under Roman rule, the great and puissant mistress of the East.

DIES AND MONOGRAMS. Working with such material as has been at the writer's disposal on this side of the Atlantic, the dies at Antioch seem all to have been either adjusted or actually fixed in the position ↑↑ before striking. At least, among the silver and bronze coins examined in the original no other position has been discovered.

When the full material of the Seleucid issues at Antioch can be studied in casts or in the original it will undoubtedly be found that obverse dies were often employed for a considerable length of time. Working only from a few coins in the original, and depending on photographs and plates for the remainder, it has not always been possible to establish beyond a doubt the seeming identity of dies used continuously for successive issues. In a few instances, however, the fact that a certain obverse die has been used by various magistrates has been noted. Such use, incidentally, proves the writer's thesis that all monograms found on the Antiochene issues are personal in character and cannot be translated into city names as has so often and so disastrously been attempted in the past. Only the letter A, holding a regular and particular position on the reverses of the tetradrachms of Antiochus VII and on those from Antiochus VIII to the end of the dynasty, has any claim to pose as an indication of the mint.

There are instances throughout the coinage where certain monograms seem to have become slightly changed in form through constant use in successive issues but, none the less, probably belong to one and the same magistrate. Thus, to mention but a few, we have  under Demetrius II (1st reign, no. 199),  ,  , and  under Demetrius II, Antiochus VI and Tryphon.  and  seem also to be interchangeable. An intensive study of these monograms would be both instructive and interesting, but time as well as material are at present lacking. There are numerous gaps still to be filled as the writer's own experience would seem to show. In several instances where observation of a preceding and a following series would suggest the presence of a certain monogram, coins bearing these monograms have turned up before the completion of this paper to fill the gap and to prove that there

really was some systematic ordering in the officials signing the various issues. A combined study of both monograms and dies will eventually give us a more or less complete list of those yearly controllers and their assistants who seem to have varied in number under the different reigns. Under Demetrius there seem to have seldom been over three or four subordinates yearly, under Antiochus VI this number has risen to six and seven. Perhaps the number depended upon the exigencies of the times, the quantity of money to be issued, or possibly, under certain reigns, to the number of official positions that had to be dispensed as favors among persons who had helped a successful king to overthrow his predecessor.

Denominations. The denominations struck at Antioch are more numerous and appear under the different reigns in more complete series, than at any other mint of the empire. In gold we have the oktadrachms (or quadruple staters) and staters; in silver we have tetradrachms, drachms, hemidrachms (or triobols), diobols and obols; in bronze we have what appear to be two denominations which at times are increased to three and, under Antiochus IV, to five or more. The subject of the bronze issues, through lack of enough actual specimens, has had to be merely touched upon in this paper and it is to be hoped that some one with better opportunities will carry it further. For these bronze coins have more varied types than the silver, and many more magistrate's letters, monograms and symbols which will undoubtedly assist in filling lacunae left by the silver.

Under the Seleucid sovereigns at Antioch the various denominations in the precious metals were always struck on the Attic standard. On the whole, the Antiochene standard of fineness and fullness of weight compares very favorably with the issues of other Greek states at this time. But, like the history of so many other coinages in the past, the Seleucid, too, gradually became of poorer and more stereotyped style, of lighter weight and more debased metal as the puppet kings in whose name it was struck grew weaker in power, ability, resources, and morals.

ADDITIONS AND CORRECTIONS

SELEUCUS II. The bronze coinage that was issued in conjunction with our tetradrachm no. 1 is to be found in the comparatively common variety with obverse: Head of Athene to right in crested Corinthian helmet; reverse: Nike standing to left placing wreath on king's name, before her inverted anchor, behind her, ⊻ (Hunterian Coll., no. 24, there attributed to Seleucus I). This monogram is a characteristic one of the Antiochene mint at this time.

SELEUCUS III. Because of its strikingly close similarity in appearance and technique to our tetradrachm no. 3 (Plate I) we should undoubtedly also assign to the Antiochene mint for this reign the British Museum tetradrachm no. 5 illustrated as no. 7 on Plate vii of the London catalogue. At any rate a comparison of the obverse dies of these two coins would certainly lead one to suppose that the same artist had cut them, and if this is the case, then probably in the same mint.

A specimen of the contemporary bronze coinage of Seleucus III struck at Antioch will be found in nos. 6 and 7 (Plate vii, no. 8) of the British Museum Catalogue. These coins are identical in style with the immediately succeeding bronze issues of Antiochus III and, in addition, bear the characteristic monogram ⊻.

ANTIOCHUS III. In studying closely the details of the portrait appearing on the gold stater no. 19 (Plate II) it becomes evident that this coin should be transferred from Series II to Series I. The features not only are those of a young man (at the time of Series II Antiochus was over thirty-five years of age) but the actual details and style of the portrait approximate very closely to the one found on the obverse die of our no. 12, Plate I.

In conjunction with the two denominations of bronze coins described on page 8, there is a third size midway between. The types are identical with those of the largest size, namely: obverse, Laureated head of Antiochus III; reverse, Apollo seated. A specimen is given as no. 51, page 28 of the British Museum Catalogue.

DEMETRIUS II (First reign). The monogram in the exergue of no. 201 should be ⍝.

ANTIOCHUS VI. The reference to Plate IX for no. 258, page 67, should be disregarded; while no. 259 (London, no. 20) is represented under no. 259 on Plate IX.

ANTIOCHUS VIII. A specimen of drachm no. 391 is reproduced under that number on Plate XI.

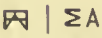
TABLE OF ISSUES

No.	Denomination	On left	In exergue	On right
		SELEUCUS II		
1	Tetradrachm			
2	"	"		
		SELEUCUS III		
3	Tetradrachm			
4	"	"		
5	"			
6	"			
		ANTIOCHUS III		
		Series I		
		Group a		
7	Tetradrachm	|		
8	"	|		
9	"			
		Group b		
10	Tetradrachm	|		
11	"	|		
12	"			
13	"			
14	"	" (variety)		
15	"	|		
		Series II		
		Group a		
16	Stater			
17	Tetradrachm			M
18	"	"		
		Group b		
19	Stater			
20	Tetradrachm			
21	Drachm	"		
22	Tetradrachm			
23	Drachm	"		
24	Tetradrachm	TRIPOD		

No.	Denomination	On left	In exergue	On right
		Series III		
25	Oktadrachm	ROSE		
26	Tetradrachm	BOW IN CASE		
27	"	" " "	AΣK	
28	"	" " "	ACK	
29	"	HORSE'S HEAD		
30	"	ANCHOR		
		SELEUCUS IV		
31	Tetradrachm	STAR		
32	"	FILLETED PALM BRANCH		
33	"	WREATH-BEARING NIKE		
34	"	FILLETED PALM BRANCH		
35	"	" " "	⏃	
36	Drachm	PALM BRANCH	"	
37	Tetradrachm	FILLETED PALM BRANCH	M	
38	"	" " "	⏁	
39	"	PALM BRANCH and WREATH	⏃	
40	"	FILLETED PALM BRANCH and APLUSTRE	"	
41	"	PALM BRANCH	⊢	
		ANTIOCHUS IV		
		Series I		
		Group a		
42	Tetradrachm	LYRE	⏃	
43	"		"	LYRE
44	"	TRIPOD	"	"
		Group b		
45	Tetradrachm	TRIPOD	⊢	
46	"	"	⏃	
47	"	"	⍓	
48	"	"	⏄	
49	"	"	⊓	
50	"	"	⍀	
51	"	"	B	
52	"	"	Δ	
53	"	"	⍁	
		Series II		
		Group a		
54	Tetradrachm		⏃	
55	"		IΣ	
56	"		—	

No.	Denomination	On left	In exergue	On right
		Group b		
57	Drachm	no monogram		
58	Bronze I	" "		
59	" II	" "		
60	" III	" "		
61	" IV	" "		
		Series III		
		Group a		
62	Stater	no monogram		
63	Tetradrachm	(Zeus type) "	"	
64	"	(Apollo type) "	"	
65	Hemidrachm	"	"	
66	Diobol	"	"	
		Group b		
67	Tetradrachm	⏃		
68	"	⏁		
69	"	⏄		
70	"	⏅		
71	"	⏆		
72	"	⏇		
73	"	M		
		ANTIOCHUS V		
74	Tetradrachm	⏃		
75	"	⏇		
76	"	⏈		
77	"	⏉		
77a	"		⏊	
78	Drachm	no monogram		
		DEMETRIUS I		
		Series I		
		Group a		
79	Tetradrachm	⏃		
80	"	" (variety)		
81	"	⏇		
		Group b		
82	Tetradrachm	⏊		
83	"	⏃		
84	"		⏇	
85	"		Λ	

No.	Denomination	On left	In exergue	On right
		Group c		
86	Tetradrachm	Φ		
87	"	⋈ or ⋈		
88	"	囧		
89	"	no monogram		
90	"	⋀		
91	"	囧		
92	"	⋀		
93	"	EY		
94	"		EI	
		Series II		
		Group a		
95	Tetradrachm	⌂		
96	"	⋀		
97	"	⊢		
98	"		⊢	
		Group b		
99	Tetradrachm	⌂		
100	"	⋀		
101	"		⊢	
		Series III		
		Group a		
102	Tetradrachm	囧 | ⌂	HNP	
103	"	" | ⋀	"	
104	"	" | ⊢	"	
105	"	" | MI	"	
		Group b		
106	Tetradrachm	囧 | ⌂	ΘNP	
107	"	" | ⋀	"	
108	"	" | ⊢	"	
109	Drachm		囧 ⋀ | ΘNP	
110	"		" ⊢ | "	
		Group c		
111	Tetradrachm	囧 | ⌂	ΞP	
112	"	" | ⋀	"	
113	"	" | ⊢	"	
114	Drachm		囧 ⌂ | ΞP	
115	"		" ⋀ | "	
116	"		" ⊢ | "	

No.	Denomination	On left	In exergue	On right
		Group d (1st issue)		
117	Tetradrachm		AΞP	
118	"	" | 	"	
119	"	" | 	"	
120	Drachm		 | AΞP	
121	"		" | "	
122	"		" | "	
		Group d (2nd issue)		
123	Tetradrachm	 | MI	AΞP	
124	"	" | 	"	
125	"	" |	"	
126	Drachm		 | AΞP	
127	"		" P | "	
		Group e		
128	2½ Stater	 | ΣA		BΞP
129	2 "	" |		"
130	Tetradrachm	" |	BΞP	
131	"	" |	"	
132	"	" |	"	
133	Drachm		 | BΞP	
134	"		" | "	

ALEXANDER I

Series I

Group a

135	Tetradrachm	CORNUCOPIAE	ΓΞP 	
136	"	"	"	
137	"	" and Θ	"	
138	Drachm	"	"	
139	"	"	"	
140	"	" and 	"	
141	"	" and E	"	

Group b

142	Tetradrachm		ΔΞP	
143	"	 , "	"	
144	"	 , "	"	
145	"	"	"	
146	"	"	"	
147	"	"	"	
148	"	"	"	
149	Drachm		"	
150	Tetradrachm	 | 	"	

No.	Denomination	On left	In exergue	On right
		Group c		
151	Tetradrachm		ΕΞΡ	
152	"	"	"	
153	"	"	"	
154	"	CORNUCOPIAE	"	
155	"		"	
156	"		"	
		Group d		
157	Tetradrachm		ΣΕΡ Ζ	
158	"	"	" Θ	
159	"		" "	
160	"	"	" 	
161	"	"	"	
		Group e		
162	Tetradrachm		ΙΞΡ (—)	
		Series II		
163	Stater	no monogram		
164	Tetradrachm		ΠΡΟ	
165	"			
166	"			
167	"			
168	"			
169	"			
170	"		Δ	
171	"		M	
171a	"		Σ	
171b	"		Σ	
		Series A		
172	Drachm			
173	"	"		
174	"	"		
175	"	"	Θ	
		Series B		
176	Drachm			
177	"		"	
		Series C		
178	Drachm			
179	"			
180	"		" Θ	
181	"		" Σ	

No.	Denomination	On left	In exergue	On right
		Series D		
182	Drachm		Θ	
183	"		" A	
184	"		"	
		Series E		
185	Drachm		K	
186	"		Θ	
187	"		ΠΡ	
188	"		Δ	
189	Hemidrachm	CORNUCOPIAE		
190	"			
191	"			
192	"	Φ		
193	"	no monogram		
194	Diobol	" "		
		DEMETRIUS II (1st reign)		
		Group a		
195	Tetradrachm		ΖΞΡ	
196	"	"	"	
197	"	"	" Θ	
198	"	"	"	
199	"	"	"	
200	"	"	"	
		Group b		
201	Tetradrachm	PALM BRANCH,	ΖΞΡ	
202	"	" " "	"	
203	"	" " "	"	
204	"	" " "	"	
205	"	" " "	"	
206	"	" " " ,	"	
		Group c		
207	Tetradrachm	PALM BRANCH, , K	ΗΞΡ	
208	"	" " "	"	
209	"	" " " H	"	
209a	"	" " "	"	
210	Drachm	,	ΗΞΡ	
211	"	"	"	
212	"	" K	"	
213	"	STAR "	—	
214	"	,	ΗΞΡ	
215	Hemidrachm	|		

No.	Denomination	On left	In exergue	On right
		ANTIOCHUS VI		
		Group a		
216	Tetradrachm	ΗΞΡ		ΤΡΥ
217	"	"		ΤΡΥ | 
218	"	"		" | 
219	"	"		" | 
220	"	THYRSOS, ΗΞΡ		" | Κ
221	"	" "		" | 
222	Drachm	BUNCH OF GRAPES, Κ	ΗΞΡ	
223	"	" " "	"	
224	"	" " "	"	
225	"	" " "	"	
226	"	" " "	"	
227	"	" " "	"	
		Group b		
228	Tetradrachm	THYRSOS ΘΞΡ		ΤΡΥ | ΙΠ | 
229	"	"		" |  | ΣΤΑ
230	"	"		" |  or  | "
231	"	"		" |  | "
232	"	"		" | | "
233	"	"		" | | "
234	"	"		" | | "
235	Drachm	BUNCH OF GRAPES	ΘΞΡ ΣΤΑ	
236	"		" "	
237	"		" "	
238	"		" "	
239	"		" "	
		Group c		
240	Tetradrachm	ΟΡ		ΤΡΥ |  | ΣΤΑ
241	"	"		" | | "
242	"	"		" | | "
243	"	"		" | " | —
244	"	"		" | Φ | ΣΤΑ
245	"	"		" |  | "
246	Drachm		ΟΡ ΣΤΑ	
247	"	or	" "	
248	"	or 	" "	
249	"	Φ	" "	
250	"		" "	
		Group d		
251	Hemidrachm	no monogram		
252	"		Κ	

No.	Denomination	On left	In exergue	On right
253	Hemidrachm			
254	"			
255	"			ΣΤΑ
256	Diobol			"
		Group e		
257	Drachm			ΤΡΥ
258	"			" X or X
259	"			"
260	"			"
		TRYPHON		
261	Tetradrachm	X		
262	"	X		
262a	"			
263	"	no monogram		
264	"			
265	Drachm	X		
265a	"			
266	"	XP		
267	"			
268	"	ΠP		
269	"			
270	"			
271	"			
272	"	Π		
		ANTIOCHUS VII		
		Group a		
273	Tetradrachm		| or	
274	"	"	| H	
275	"	"	| AI	
276	"	"	|	
277	"	"	|	
278	"	"	|	
279	"	"	| H	
280	"	"	| Λ	
281	"	"	| Π	
282	"	"	| A	
		Group b		
283	Tetradrachm		| A	
284	"	"	"	
285	"	"	"	
286	"	"	"	ΦΙ

No.	Denomination	On left	In exergue	On right
287	Tetradrachm	Ⱶ | A		A
288	"	" "		Δ
289	"	" "		H
290	"	" "		O
291	"	" "		Ξ
292	"	" "		Φ
		Group c		
293	Tetradrachm	Ⱶ | A, A		B
294	"	" | ", "		E
295	"	" | ", "		K
296	"	" | ", T		A
297	"	" | ", "		Λ
298	"	" | ", O		Λ
299	"	" | ", M		K
		Group d		
300	Drachm	Ⱶ | A		
301	"	"		A
302	"	" | Ⱥ		
303	"	"		Ⱥ
304	"	" | O		
305	"	"		O
306	"	" | Π		
307	"	"		Π
308	"	" | Φ		
309	"	"		Φ
310	"	ⱶ | Ⱶ		
		Group e		
311	Tetradrachm	ⱶ | A		
312	Drachm	Ⱨ | Δ		
312a	"	ⱶ | Ⱥ		
313	Tetradrachm	B | A		
314	Drachm	A | B		
315	Tetradrachm	Ⱡ | A	ⱶ	
316	Drachm	Ⱬ		
317	"	"		O
		DEMETRIUS II (2d reign)		
318	Tetradrachm	ⱶ		
319	"	Ⱨ | E		
320	"	Ξ	O (beneath throne)	
321	"	"	Δ " "	

No.	Denomination	On left	Beneath throne	On right
322	Drachm		ΞO (in exergue)	
323	"	Ξ	Δ	
324	"	no letters		
325	"	Δ ·	Ω	

ALEXANDER II

Group a

326	Tetradrachm	ΙΣΙ	Δ	
327	"	"	STAR over Δ	
328	"	"	Σ	
329	"	"	· STAR over Σ	
330	"	"	" " ΑΙ	
331	"	"	" " ⊗	

Group b

332	Tetradrachm	ΑΡ	Δ	
333	"	"	STAR over Δ	
334	"	"	" " Σ	
335	"	"	ΑΡ	
336	Drachm	" | Α		
337	Hemidrachm	Α (ΑΡ?) | Σ		
338	Diobol	no monogram or letter		

Group c

339	Tetradrachm	ΑΡ	Δ	
340	"	"	Σ	
341	"	"	ΑΦ (ΑΙ)	
342	Drachm	" | Δ		
343	"	" | Σ		
344	"	" | ΑΦ		
345	"	" | ΔΙ (or ΑΦ?)		
346	Hemidrachm	", Δ		

Group d

347	Tetradrachm	Ξ	Δ	
348	"	"	Σ	
349	"	"	Α	
350	Drachm	" | Σ		
351	"	" | ΑΦ		
352	Hemidrachm	" | "		

Group e

353	Tetradrachm	⁂	Σ	
354	"	"	Α	
355	"	"	ΑΙ	

No.	Denomination	On left	Beneath throne	On right
		Group f		
356	Drachm	𐡀 | AΦ		
357	"	" | A𐡉		
		Group g		
358	Stater	no monogram or letters		
		CLEOPATRA AND ANTIOCHUS VIII		
359	Tetradrachm	IE	A	
360	"	"	Δ	
361	"	"	AI	
		ANTIOCHUS VIII (1st reign)		
No.	Denomination	On left	In exergue	On right
		Group a		
362	Tetradrachm	IE | Θ		
363	"	" | 𐡄		
364	"	" | 𐡈		
		Group b		
365	Tetradrachm	IE | A		A
366	"	" "		AI
367	"	" "		N
368	"	" "		O
369	"	" "		P
370	"	" "	K	A
371	"	" "	"	AI
372	"	" "	"	P
373	"	" "	"	Φ
374	"	" "	N	N
375	"	" "	P	P
376	"	" "	Δ	
376a	"	" "	P	
377	"	" "	Φ	
378	"	" "	Π	
379	Drachm	IE		
380	"	(I)E		
		ANTIOCHUS IX (1st reign)		
381	Tetradrachm	𐡍 | A		
382	"	" "		A
383	"	" "		Δ
384	"	" "		N
385	"	" "		O
		ANTIOCHUS IX (2d reign)		
386	Tetradrachm	𐡌 | A		Γ

No.	Denomination	On left	Beneath throne	On right
		ANTIOCHUS VIII (3d reign)		
387	Tetradrachm	⚘ | A		Γ
388	"	" "		Δ
389	"	" "		K
390	"	" "		Ξ
391	Drachm	" | Γ		
392	"	" | N		
393	Hemidrachm	" | Γ		
394	"	" | N		
395	Diobol	" | A		
		ANTIOCHUS IX (3d reign)		
396	Tetradrachm	⚘ | A		O
397	"	" "		P
398	"	" "		Σ
399	"	" "		KY
400	"	" "		⚘
401	"	" ", ⚘		
402	"	" "		Δ
403	"	" ", ⚘		
404	Drachm	" | M		
		ANTIOCHUS VIII (4th reign)		
405	Tetradrachm	⚘ | A	⚓ (⚘)	
406	"	" "	A	
407	"	" "	Π	
408	"	" "	⚘	
409	Drachm	" "		
410	"	" | Γ		
411	"	" | Δ		
412	"	" | P		
413	Hemidrachm	" | A		
		ANTIOCHUS IX (4th reign)		
414	Tetradrachm	⚘ | A	⚓ (⚘)	
415	"	" ", H	"	
416	"	" ", Π	"	
417	"	" "	Π	
418	"	" "	N	
419	Drachm	⚘ | Π		
420	Hemidrachm	"		

No.	Denomination	On left	Beneath throne	On right
		SELEUCUS VI		
		Group a		
421	Tetradrachm	A | ⅂ | A	⏃	
422	"	" " "	A	
423	"	" " "	N	
		Group b		
424	Tetradrachm	₱ | A	C	
425	"	" "	"	
426	Drachm	" "		C
427	"	" ", C		
428	Hemidrachm	₱, C		
		ANTIOCHUS X		
		Group a		
429	Tetradrachm	⊠ | A	⏃	
		Group b		
430	Tetradrachm	⋿ | A	⏃	
431	Drachm	" "		
432	Hemidrachm	" "		
		ANTIOCHUS XI		
433	Tetradrachm	⏁ | A	⏃	
		DEMETRIUS III		
434	Tetradrachm	ω | ⊓ | A	⏃	
435	"	N | A	"	
		PHILIP		
		Group a		
436	Tetradrachm	N | A	⏃	
		Group b		
437	Tetradrachm	Φ | A	⏃	
438	"	" ", Δ	"	
439	"	" ", H	"	
440	"	" ", Θ	"	
441	"	" ", N	"	
442	"	" ", O	"	
443	"	" ", Φ	"	

Group c

No.	Denomination	On left	In exergue	Beneath throne	On right
444	Tetradrachm	Φ | A	Δ	⏃	
445	"	" "	Λ	"	
446	"	" "	M	"	
447	"	" "	N	"	

No.	Denomination	On left	In exergue	Beneath throne	On right
448	Tetradrachm	Φ | A	Π	⏃	
449	"	" "	Σ	"	
450	"	" "	T	"	
		Group d			
451	Tetradrachm	Φ | A, A	H	⏃	
452	"	" ", 🜲	"	"	
453	"	" ", I	Θ	"	
		Group e			
454	Tetradrachm	Φ | A (?), Φ	🜨	⏃	
455	"	" "(?), 🜲	⏄	"	
456	"	" "(?), 🜃		"	
457	"	" "(?), 🜏 | 🜁	AN	"	
458	"	" "(?), 🜲		"	
459	"	ΔH | O | M | ЄP	(?)	"	
		ANTIOCHUS XIII			
460	Tetradrachm	⋈			
461	"	"		P	



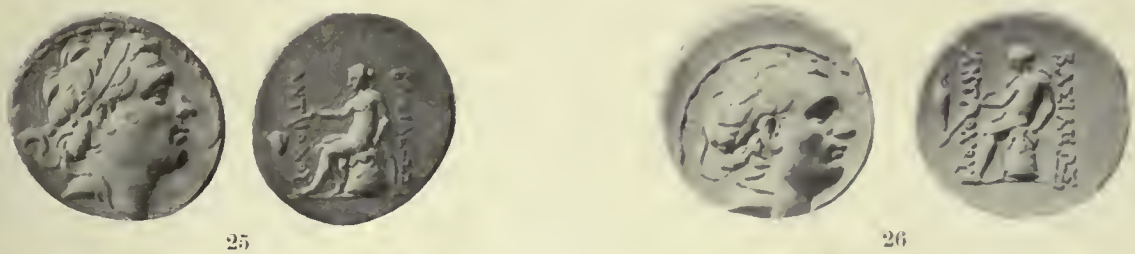
SELEUCUS II (1), SELEUCUS III (3-4), ANTIOCHUS III (7-18)



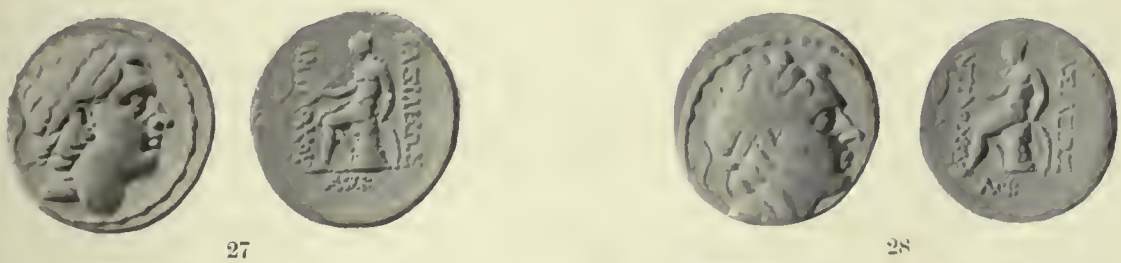
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22 24



25 26



27 28



29 30



31 35

ANTIOCHUS III (19-30), SELEUCUS IV (31-35)



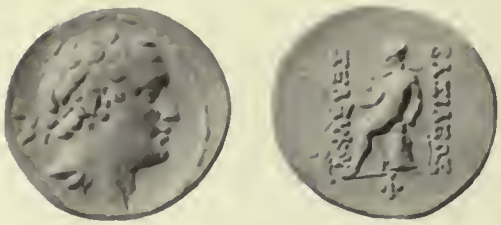
37



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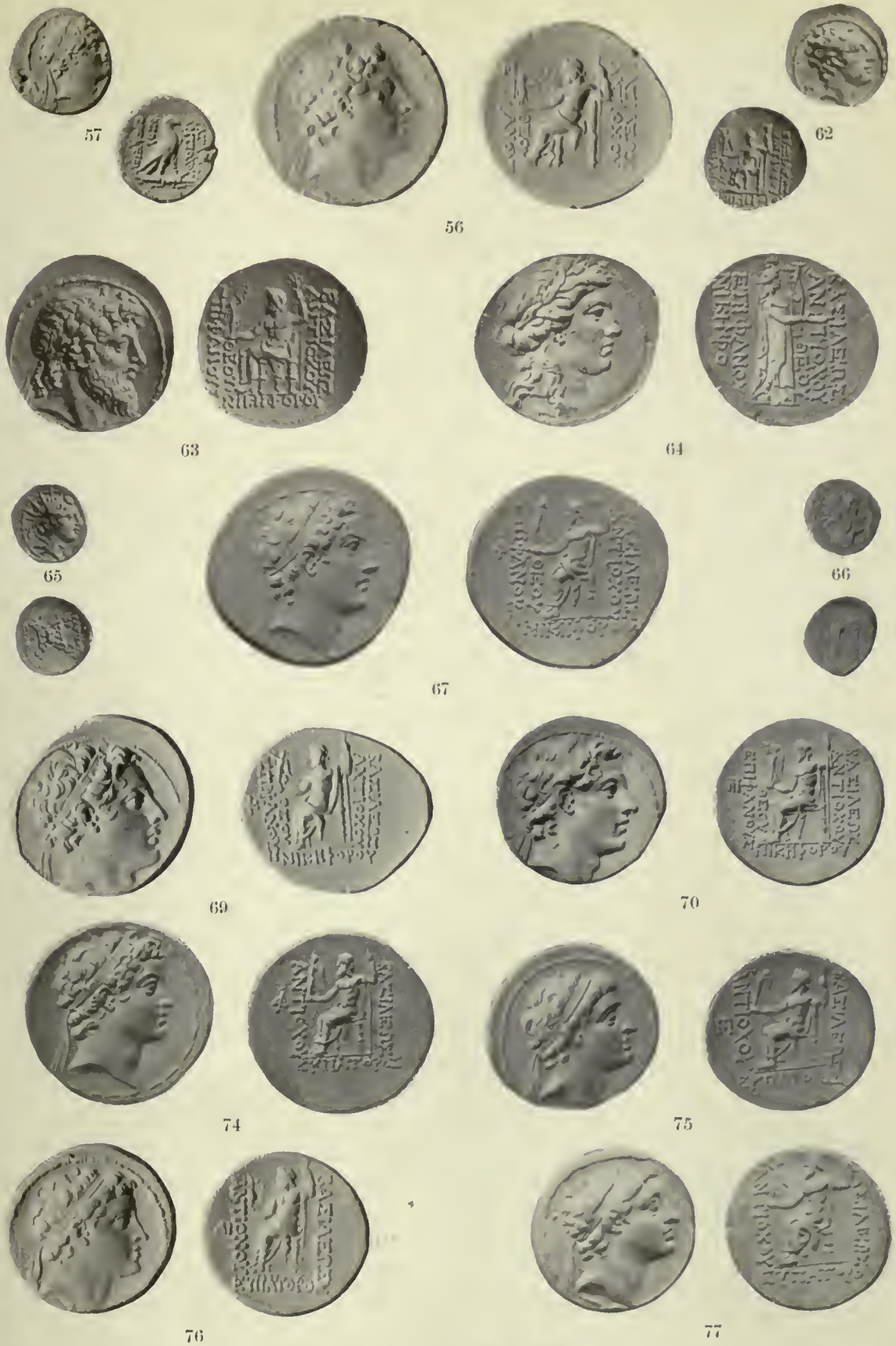


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SELEUCUS IV (37-40), ANTIOCHUS IV (42-44, 54-55), ANTIOCHUS V (45-52)



ANTIOCHUS IV (56-70), ANTIOCHUS V (74 77)



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82



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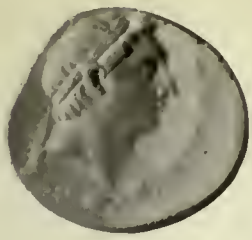


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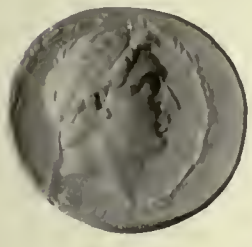
DEMETRIUS I



93



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98



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100



103



108



111



118



124



125

DEMETRIUS I



DEMETRIUS I (109-130). ALEXANDER I (135-192).



165



170



198



201



202



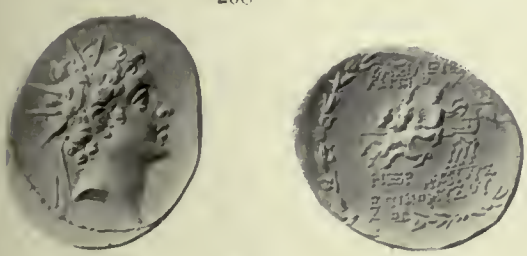
206



208



211 212 215



216



217



228

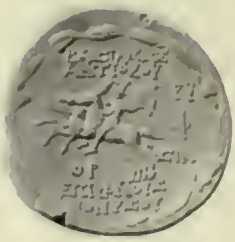


232

ALEXANDER I (165-170), DEMETRIUS II (198-215), ANTIOCHUS VI (216-232).



243



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287

ANTIOCHUS VI (222-259), TRYPHON (261-267), ANTIOCHUS VII (273-287)



311





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353





351

ANTIOCHUS VII (304-315). DEMETRIUS II (320-323). ALEXANDER II (329-353).



359



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362



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371



376



382



386



388



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391 392 393

CLEOPATRA AND ANTIOCHUS VIII (359-360), ANTIOCHUS VIII, first reign (362-376), ANTIOCHUS IX, first reign (382), ANTIOCHUS IX, second reign (386), ANTIOCHUS VIII, third reign (388-393)



ANTIOCHUS IX, Third reign (396-404), ANTIOCHUS VIII, Fourth reign (405-410), ANTIOCHUS IX, Fourth reign (414-420), SELEUCUS VI (421-428).



429



431



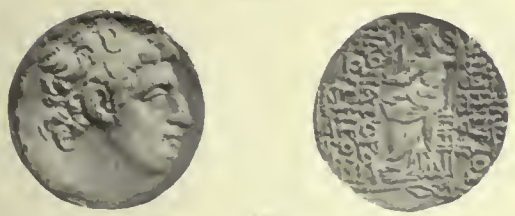
430



433



435(a)



435(b)



436



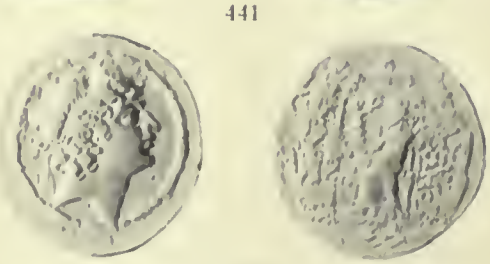
437



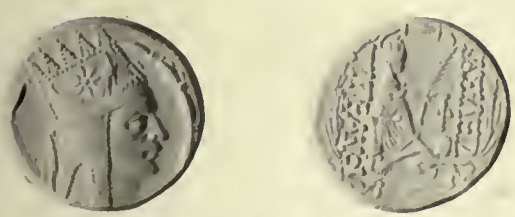
441



448



458



A



461

ANTIOCHUS X (429-431), ANTIOCHUS XI (433), DEMETRIUS III (435a-435b), PHILIP (436-458), TIGRANES (A), ANTIOCHUS XIII (461).



Jos S Lester

PRIVATE SILVER COINS ISSUED IN THE UNITED STATES

The Leshers or Referendum Pieces

By FARRAN ZERBE

Octagonal silver pieces dated 1900 and 1901 made by Joseph Lesher of Victor, Colorado, for commercial use, and classed as coins by the maker, have been given the name of LESHERS. As a late private issue of silver for exchange purposes, not depending upon necessity or demand; the idea and product of an advocate of free coinage of silver; issued in defiance of government statute; and for a time performing in a limited way the service of money in central Colorado, these coins contribute an extraordinary and interesting addition to American numismatics.

The entire issue is believed not to have exceeded three thousand pieces. Different types, sizes and imprints compose twelve varieties, to which may be added minor varieties due to slight variations in detail. Although the issue is recent, all are now scarce and in demand. No modern series, of which I know, has developed more persistent inquiry for facts and specimens by the few collectors interested in securing information and acquiring new varieties. The neighborhood of their production and the localities where they were issued have been repeatedly canvassed in the past ten years, but comparatively few specimens in proportion to reasonable expectations have been obtained or located. The record of those in specialized collections and appearing in numismatic sale catalogues for the last decade, aggregate less than one hundred; and the only quantity known to exist is under two hundred pieces accumulated up to 1905 and (quietly) held since then. Thus we have evidence of the rapidity with which an issue, even when of good proportions, may disappear, and it is the more notable, because in this instance, loss results if the pieces are converted into bullion.

Effort to obtain information for a numismatic record of LESHERS has not been left to the present. It has been in process to a greater or less degree for some time, but it is only by bringing together bits of information acquired by several individual collectors that a connected story is provided. Letters of inquiry to Mr. Lesher received no answer. When he was interviewed personally he claimed to have preserved no

records, and in many instances his memory serves only for approximate answers to direct questions. However there is little numismatically essential to be added to the facts which have been brought together and confirmed by the present writer.

The first published numismatic notice in regard to this series that has come to my attention was by Lyman H. Low in cataloguing two specimens for the H. G. Brown collection sale in 1904. Mr. Low referred to them thus: "Probably but little thought of to-day, but I judge a few years hence will be among the rarities sought for." It seems apropos to record that Mr. Low here scored as prophet, for while the series is still little known and yet to be edited, the very specimens Mr. Low mentioned would be worth to-day five or six times the price they brought in 1904.

A brief reference was made to "referendum souvenir trading pieces" in my notes to The Numismatist, May, 1905. The only extended numismatic reference to the series is contained in the article by E. H. Adams published in The Numismatist, August, 1911. Mr. Adams, who bases his article on material supplied by Judson Brenner, writes in introduction: "It is curious that so little information can be obtained in regard to a coinage that took place in the United States not more than eleven years ago, yet nevertheless the operations of Joseph Lesher, who issued the odd octagonal silver pieces bearing his name at Victor, Colorado, in 1900, are shrouded in almost complete obscurity." He describes five varieties, all there were then known to him.

I and others who were interested in an effort to secure more detailed knowledge, addressed letters of inquiry to Mr. Lesher and some of those who were associated with him. No replies being received we concluded that all were either dead or untraceable. In 1914, however, I chanced to meet Charles E. Briggs, an active collector of Lisbon, Iowa, who was particularly interested in LESHERS. He told me of a recent call on Mr. Lesher at his home in Victor and of the result of his search for specimens and information.

Victor, the home of the LESHERS, is in the heart of the Cripple Creek gold mining section of Colorado, a few hours ride from Colorado Springs. On my next visit to that section in 1914, I spent a few pleasant hours with Joseph Lesher and his wife. I found him an affable, well-preserved old gentleman, who told me he was born in the vicinity of Toledo, Ohio, and was about eighty years old; that he came to Colorado in its pioneer days, and after a residence of some years he returned

to Ohio and engaged in the livery business in Toledo for over ten years; then after a few years of farming in the vicinity, he returned to Victor about twenty-eight years previous to my visit. He has since resided there and engaged during his active years in mining and real estate.

He referred with surprise and satisfaction to the visits he had had from collectors, and to the many mail inquiries regarding his "referendums." He had not expected this interest from numismatists and he showed delight when I told him I was seeking information from which to make an accurate and permanent record. He looks back upon the production of his "referendums" not as anything novel, but simply as one might consider any ordinary article developed by bringing into material form an idea for which there seemed a profitable market. He had no thought of any future particular interest or he would have kept records and been better prepared to give information.

All the pieces are stamped REFERENDUM, and Mr. Lesher speaks of them by that name, and calls them pieces of silver of convenient size and value, shaped to be distinguished from government coins, showing their quality and price, guaranteed to be redeemed by the issuer, and referred to the people for use or rejection as a medium of exchange. Colorado's pronounced endorsement of the free coinage of silver at the ratio of 16 to 1, which Mr. Lesher advocated in the national campaigns of 1896 and 1900, was the seed from which grew his idea for a silver coin issue as a private enterprise. He believed the people of Colorado and other parts of the country wanted and would use more silver dollars if they were supplied.

The first issues, dated 1900, contain one ounce of "coin silver" and are of the novel denomination of $1.25. It is said the plan was to have merchants pay them out at $1.00 and receive them back at $1.25 in exchange for merchandise. However, I found no evidence or practice confirming this, and the plan appears on its face as impractical. While Mr. Lesher does not confirm it, it is reasonable to believe that there may have been some particular purpose for making the value $1.25 other than to have them of one ounce composition and valued in proportion to relative cost and profit.

Dies for the first variety were made by Frank Hurd of Denver; all the other dies were made by Herman Otto. I had a pleasant call with Mr. Otto at his Denver studio. He is a native of Germany and an artist with brush and chisel as well as a designer and die cutter. Dur-

ing his residence in England years ago he worked on dies for the British government. He said the Lesher dies were made under instructions as to detail, and that he had little opportunity for using his judgment for best effects. He recalled some dies breaking and his making new ones to replace them. He had no record of the number of dies made but believed those I described included all the varieties.

The most interested collectors of LESHERS are E. B. Morgan, Esq., president of the Colorado State Historical Society; C. W. Cowell, and H. O. Mann, all of Denver; Judson Brenner, Youngstown, Ohio; C. E. Briggs, Lisbon, Iowa, and the writer. The quantity accumulator is Jean Maunovry, now of Rochester, New York, who was for some years a resident of Denver and interested in mining claims in the Cripple Creek district. Mr. Maunovry says he purchased from one person a lot of about one hundred in 1905, and several at different times from banks, curio shops and individuals. The series being of local interest, the Denver collectors have been active in their quest for varieties; Mr. Brenner took up the trail soon after the pieces were issued; and Mr. Briggs has been particularly active in seeking specimens. If they were to be had Mr. Briggs should now have a good supply, for in addition to several visits to the Cripple Creek section he has advertised for LESHERS in the newspapers of that vicinity, and has sent circulars offering to purchase to the addresses of mail buyers which he received from Mr. Lesher, but has secured only a few specimens.

To all of these gentlemen I wish to acknowledge indebtedness for information which they have given me, and for the use of their specimens for comparison and illustration. It is notable that a complete collection is yet to be brought together. The Brenner, Briggs and Zerbe collections, the most complete as yet, each has two varieties not possessed by either of the others, and four different collections would have to be drawn upon to bring together all known varieties. This emphasizes the rarity of some of the varieties, since for more than ten years completeness has been the aim of all the six collectors mentioned.

All the pieces have provision made for numbering them. They were numbered by hand, each character on a separate punch not always uniform, thus producing numbers irregular in alignment and depths. Some have a period after the number, but it is not on all. Mr. Lesher says a regular system of numbering was not maintained, and the numbers cannot be accepted as a guide to the relation of one series to another or as to the number produced either in respect to varieties or total issue.

All the pieces are octagonal and with plain edge. According to Mr. Lesher they are composed of silver .950 fine with copper alloy, this fineness more than making good the claim of quality "coin silver" stamped upon them. They were struck by various metal stampers in Denver.

In the following descriptions of all known varieties the absence or misuse of punctuation marks in the inscription will be noted, but in most instances no reference will be made except by the illustrations to various dots, lines and scrolls used as space ornaments or dividers.

1900 ISSUES

All are 35 millimeters across center, stamped 1 OZ COIN SILVER and with PRICE $1.25.



1. **First type, 1900.** Obverse: JOS LESHERS REFERENDUM SOUVENIR. in upper hemicircle; below, in six lines, One oz of Coin | »Silver« | Price 1.25 | M.F.G.D VICTOR | »COLO.« | 1900

Reverse: A COMMODITY | WILL GIVE | IN | EXCHANGE | CURENCY COIN | » OR « | MERCHANDISE | AT FACE VALUE | NO in nine lines.

One hundred struck and numbered consecutively from 1 to 100. These were widely distributed due to mail inquiries following newspaper notices, and from the number located these are about fourth in rarity. The dies were seized by the government and production stopped.

Considerable newspaper comment followed the initial production of the pieces. One item, dated Victor, November 13, 1900, reads: "Joseph Lesher, a Colorado pioneer and silver mine owner, has procured a die, laid in a supply of bullion, and manufactured several silver coins, each containing one ounce of pure silver. He calls his coins 'Referendum Dollars' because they are to be referred to the people for acceptance or rejection.

"Mr. Lesher proposes to demonstrate that the 'intrinsic value' theory is a delusion and a snare. His silver at the present quotation

costs sixty-five cents per ounce, the expense of coining is fifteen cents, eighty cents in all, but he values the dollars at $1.25 and intends to keep them above par. Although he is confident that the silver alone is really worth $1.29 an ounce, he admits that other people may be prejudiced. Therefore he promises to pay $1.25 in United States money on demand for each 'referendum' dollar. In order to avoid any entanglements with the Government, Mr. Lesher makes his dollars eight-sided."

While this does not exactly agree with statements made in later years by Mr. Lesher, it is perhaps as nearly a correct report as could be made of an experimental plan based on visionary theory.

Not many days elapsed after the production of the first Leshers before their producer had a call from Government officers. He now tells amusedly that on his compliance with their request to see the dies "they pulled out a little sack into which they put the dies and walked away, and I never saw the dies again." The officers claimed that the pieces had the function of coin and were therefore contrary to law. Lesher considered the interference of the Government unwarranted and appealed to Senator Teller who, according to Lesher, brought the matter to the attention of the Secretary of the Treasury. The latter, after consideration, agreed that on condition of certain changes in the inscription there would be no further interference on the part of the Government.

The following newspaper item appeared under date of November 23, 1900: "Joseph Lesher who recently made and issued one hundred silver souvenirs, which he called 'Referendum dollars,' says he has assurances from the United States District Attorney that his scheme is not illegal, and he has ordered a new die from which 10,000 will be struck off immediately. The silver will cost him $6,500 and the making $1,500. He will sell the coins for $12,500 and redeem them on demand for the same amount. The new coins will bear the name of a Victor grocery man, who agrees to redeem them in merchandise or money."

The pieces referred to are known as the Bumstead type. A. B. Bumstead, the name of a Victor merchant who issued and redeemed them, is engraved in the die. Dies for this and the balance of the series are by Otto. They are well cut and arranged, and all have a narrow struck up flat frame, not always uniform, with a beaded border.



2. **Bumstead Type — First Reverse.** Obverse: An ideal mountain mining scene occupies upper half of field; in two lines at top divided by the central mountain peak PIKES–PEAK | SILVER MINE; on lower half · A COMMODITY · | » WILL GIVE « | · IN EXCHANGE · | MERCHANDISE | –*AT*– | A. B. BUMSTEAD | N°. in seven lines.

Reverse: JOS. LESHERS REFERENDUM SOUVENIR in upper five-eighths of circle near edge; balanced in center of upper half is a devise from the seal of the State of Colorado including its motto NIL SINE NUMINE (Nothing without God) which separates 1. OZ. COIN; below, » ·SILVER· « | PRICE 1.25. | M'F'D. VICTOR | COLO. | » ·1900· « in five lines.

These are found numbered up to about 600, which was probably the number struck. But few with this reverse have been located, and the type appears to be about third in rarity. The dies are still held by Mr. Lesher, and the obverse die is chipped on the edge.

This variety is distinguished from No. 3 by scrolls on the reverse, ornamenting the field at sides of the State seal device, and a line or dash above COLO. Mr. Lesher is uncertain, but thinks that the reverse without scrolls was used first. However, the fact that I have not found any with scrolls numbered higher than 600, while all without scrolls are numbered between 600 and 1,000, and also No. 4 which has the reverse without scrolls is numbered still higher, indicates that the die with scrolls was used first as here classed.



3. **Bumstead Type — Second Reverse.** Same as No. 2 excepting that there are no scrolls in field at sides of the State seal device, or line above COLO.

Those noted are numbered between 600 and 1,000. See note following No. 2. The die, now rusted, is owned by a collector. This is the most common variety of the entire series and is classed sixth in rarity.

It is not known how many of either Bumstead varieties were struck. Mr. Lesher says Bumstead sold about 700 and was called upon to redeem only 3 pieces for cash, and all eventually disappeared from use. I have found them numbered as high as 988. It is presumed that 1,000 were struck, and while all are dated 1900 they were made and used as late as any of the series. It is surprising that so many pieces with a cash value of $1.25 each, should almost completely disappear within a few years in a small town like Victor. But two known specimens were left in the town in 1914, both framed and on exhibition and valued by their owners at $10.00 each.



4. **Bank Type.** Obverse: Upper half same as No. 2; lower half, * A COMMODITY * | WILL GIVE MERCHANDISE OR CASH | · AT · ANY · BANK · | No. in four lines; a blank field, the size and position of which suggests that provision was made for special imprint in addition to the number; at bottom, in curved line, * AT BULLION VALUE *

Reverse: Same as No. 3.

The die is now owned by a collector. Mr. Lesher says but five pieces, die trials, were struck and the bank idea was abandoned. In proposing their redemption at any bank in merchandise or cash was inviting trouble as well as Government interference at a time when the scheme in general was going nicely. It has not been learned what kind of "merchandise" banks were expected to give. Of this, the rarest type of the series, three have been located: Briggs, No. 1563, Brenner, No. 1620 and Zerbe, No. 1631. These unrelated numbers when only five were struck is unexplained and indicative of the lack of system that, I am led to think, was associated with the entire product. The 1631 is the highest number known to me in the entire Lesher series. This closes the series dated 1900 and of the value of $1.25.

It is presumed there was more or less criticism and interference by Government representatives and together with the success of the Bumstead distribution suggested the obtaining of protection against imitators, for succeeding issues. We see from the inscription on the next issue that the pieces were both patented and copyrighted, Lesher thereby considering himself licensed to make them and safe from further interference by the Government. This was a mistaken idea, for one may obtain a patent or copyright, and yet the article so protected may be prohibited if it is contrary to law.

1901 ISSUES

Weight, size and price reduced. All are 32 millimeters; weight, 412½ grains (the weight of a standard dollar), price $1.00. They have a blank field for business imprint. These imprints are made by hand-punches in Gothic style characters, for the most part in two lines.





5. Imprint Type. Obverse: Mining scene, etc., as on No. 2, below in four lines IN THE PEOPLE WE TRUST · | * A COMMODITY * | WILL GIVE IN EXCHANGE | MERCHANDISE AT, a blank space for imprint; at bottom, Nº. with line for number.

Reverse: JOS · LESHERS · REFERENDUM · SILVER · SOUVENIR · MEDAL in three-quarter circle at top, State seal device as on No. 2 divides PRICE $1.00. with U. S. | PATENT at left and Nº 62,695. at right; below in six lines, TRADE MARK REG. U. S. PAT. OFF. | Nº. 36,192. APR. 9. 1901. | DESIGN PAT. APR. 16. 1901. | * M'F'D. * | VICTOR COLO | · 1901 ·

Without business imprint. They are found with and without number. Mr. Cowell has one without number. Mr. Brenner No. 1, and Mr. Briggs No. 1022; others, all numbered below 100, have appeared in sales. Classed fourth in rarity. The obverse die is owned by a collector; the reverse die has not been located and is believed to have been destroyed. It will be noted that MEDAL has been added to the name, and while the Colorado motto, *Nil Sine Numine*, is continued, it is now IN THE PEOPLE WE TRUST, according to the added superscription.

Mr. Lesher had a quantity made for stock and does not remember what disposition was made of the remainder. Boyd Park, a jeweler of Denver at the time, who was Lesher's distributing agent for several months, is said to have had an interest in this remainder and it is supposed that they were reduced to bullion; however, this is not certain, but should any quantity lot of Leshers come to light later they would probably be of this variety (No. 5) or with Boyd Park imprint (No. 10). Denver people remember seeing quantities, hundreds they say, heaped in Park's store window. It is my impression that a quantity does or did exist for some time after they were either withdrawn from public sale, or a re-striking was considered. In 1914 a Colorado man said he could get a quantity for me if I would pay the price. I was surprised and asked him how many he could obtain. He replied, "As many as you will want, yes, hundreds." I agreed to purchase, and at once started to try and locate the dies for this type. All the other dies known had been previously examined and I knew there could be no re-strikes from them without distinguishing marks. Lesher said these dies (No. 5) had been left with Frank Hurd who was to strike the next lot in case any more were wanted. Hurd, however, was not called upon to strike any more. Lesher was lax in keeping in touch with Hurd, whose business was later sold out and his shop equipment dispersed. Since then Lesher had been unable to trace him. A search extending over about two weeks was rewarded by finding and obtaining the obverse die and planchet punch among discarded metal at a novelty works. The reverse die was not found. When I later called upon the man who was to supply a quantity, he said the man he expected to get them from was a "peculiar fellow" and he could not "do business" with him now. I have been after that quantity lot at different times since, but neither a specimen nor any information to lead to one has resulted, excepting the lot held by Mr. Maunovry. This hoard may be the one my enthusiastic would-be supplier knew of but was unable to secure.



6. Same as No. 5, but stamped — J. M. SLUSHER | CRIPPLE CREEK, COLO

J. M. Slusher was a Cripple Creek grocer, now deceased. Lesher says he had less than five hundred. They are known numbered between 49 and 248, inclusive. They appear to be about the second commonest variety and are classed about fifth in rarity.

7. Same as No. 5, stamped — SAM COHEN | VICTOR, COLO

Mr. Lesher says Cohen was a Victor jeweler and did not have many — "a few small lots at different times." Only three located, Briggs, No. 429 (double imprint, first imprint upside down), Brenner, No. 406, and Mann, No. 428. Considered second rarest imprint.

8. Same as No. 5, stamped — D. W. KLEIN & CO. | PUEBLO, COLO

During our conversation in 1914, Mr. Klein told me his firm was engaged in the retail liquor business and that he was an old friend of Mr. Lesher and experimented with the coins on that account. He had three hundred, paid Lesher 85 cents apiece for them, used them in change and trade at $1.00, and only one ever came back for cash redemption. He had not kept a specimen, and all had disappeared, where or how he did not know. During a visit to Pueblo in 1905 I located but one, No. 1071, at a pawnshop, and which I obtained. On a later visit an industrious search brought me another, No. 1051, worn smooth except for imprint. These are the only two of record.

9. Same as No. 5, stamped — GEO. MULLEN | VICTOR, COLO.

Mr. Lesher says Mullen was a shoemaker and only 100 pieces were stamped for him. Considered one of the rarest; but three specimens located, Mr. Morgan's, without number, Mr. Mann's, No. 1511, and Zerbe's, No. 1504.



10. Same as No. 5, stamped — BOYD PARK | DENVER, COLO.

This imprint differs from the preceding in that it is in smaller characters. Park was a Denver jeweler and distributing agent for Lesher, who says Park sold between 500 and 1000; if so, a good portion of them were probably without imprint for I have found nothing to indicate

that more than 200 were stamped. Excepting an unnumbered specimen in the Zerbe collection, all known are numbered between 500 and 700.

11. Same as No. 5, stamped — W. C. ALEXANDER | JEWELER | SALIDA, COLO.

The second A in Salida is an inverted V.

This is undoubtedly the rarest imprint and was unknown to collectors until 1918. The only specimen located is owned by Mr. Cowell and bears the number 8. The imprint differs from others in that it is in three lines, very thin characters and lightly struck. It was Mr. Cowell's impression that the business card was engraved, but recent information from Mr. Alexander, who is still in business in Salida is that he "obtained from Joseph Lesher, Victor, Colo., fifty of the Referendum Dollars in March, 1902, paying forty dollars for them; all of them were received stamped to my order as the one described, and numbered from 1 to 50. Have none on hand and do not know where they are located."



12. Same as No. 5, engraved — GOODSPEEDS & CO. | 26 PIKES PEAK AVE

This imprint is engraved, not stamped as are all the preceding. On account of its being engraved its admittance to the series as a variety is based on the fact that the issue was contemporaneous with the others of the same type. Goodspeeds & Co. were jewelers of Colorado Springs and experimented with Leshers by engraving a few, expecting later to have some stamped. None, however, are known to have been stamped. But one specimen is on record, No. 1015 in the Briggs' collection.

This closes the record of all varieties known. Others said to have purchased Leshers for trade use were C. W. Thomas, jeweler, Florence, Colo., and two clothiers, Lesher says probably at Canon City and Grand Junction, Colo. All these three are said to have been supplied in blank and it is not known if any were imprinted by them. Efforts to locate Thomas or to identify the clothiers were unsuccessful.

Coins with imprint space blank were supplied to any one requesting them. Imprint stamps were at the merchant's expense. None of the stamps have been located, and Lesher did not know what became of them. Considering how other material was found it is probable that if they exist they have been rusted beyond further use. With increasing interest in the series, which is to be expected from its deserved place in American numismatics, since blanks exist, caution should be exercised against engraved or otherwise forged imprints.

Mr. Lesher says about 3500, including all types, were struck. Allowing for some believed to have been melted, the distribution was probably about 3000 pieces. He says he was never asked to redeem any. The few pieces he wanted to keep, including No. 1 of the first type, have either been sold at fancy prices in recent years or, as he says, "got away when I wasn't looking."

An advertising card which was mailed out as late as 1903, reads:

THE FAMOUS VICTOR

REFERENDUM SILVER DOLLARS

are now used by the following named persons as a medium of exchange in their business. As a local medium of exchange they are a success.

SAM COHEN, exclusive agent, VICTOR, COLO.
J. W. SLUSHER " CRIPPLE CREEK.
BOYD PARK " DENVER, COLO.
C. W. THOMAS " FLORENCE, COLO.
D. W. KLEIN " PUEBLO, COLO.

(Reverse)

It is well known that these coins have a history. I am now threatened next time Congress meets that they will try to enact a law by which they will attempt to stop me making them. I am fair and impartial, and am willing to submit the question to the Courts, Public Opinion and the Press, whether or not they can do that as I have a patent or license for seven years from the Government to make them.

(Signed) JOS. LESHER,
Patentee.

While the Government probably gave Lesher cause to stamp his later products MEDALS, his literature refers to them as coins and mediums of exchange and with a spirit defiant against any interference.

Mr. Mannovry says "The Referendums were accepted as a dollar in Cripple Creek, Victor, Colorado City and Colorado Springs, and even in Denver by some banks in a speculative way. I bought several from banks." They also had limited circulation in Pueblo, but at some places their only use was as trade premiums or as items for sale as souvenirs.

In case an attempt is made to restrike any of these pieces, the chipped and rusted condition of the dies as well as certain other marks would identify these pieces at once from the originals. That Mr. Lesher stands to redeem the pieces, as per their stamped contract, makes his indifference as to the present location of the dies indefensible, and he should deem himself fortunate that he has not been imposed upon by falsely-made restrikes.

Lesher says he discontinued having more struck after enjoying a profitable market and after his interest declined. Considering the cost of dies ($60.00 a set); silver, average price 62½ cents per ounce; striking, 10 to 15 cents each; punches, patent, etc., it does not appear that the scheme could have proved a financial success.

As a referendum coiner, Higley of Connecticut, with his coppers VALUE ME AS YOU PLEASE, outdistanced Lesher both in principle and liberality, and in point of time by more than a century. The LESHERS as a private coin issue, having been used as a circulating medium at a time when the government not only fulfilled all requirements but prohibited private coining, is extraordinary if not unique — its nearest companion as a private silver coin issue since the organization of our mint is the "Sprinkle Dollar" of an earlier period and in undeveloped territory, which will be taken up later.

So long as metal shall endure in the form of coin or medal and there are collectors to prize them, Joseph Lesher, Victor, Colorado, and his "referendums" will be remembered; and in the annals of Colorado history he will trail after Clark, Gruber, Conway and Parsons, not in the same class by any means, but relatively, as a private coiner of that State.

THE SPRINKLE DOLLAR

Most American numismatists are somewhat familiar with the story of a silver piece known as the "Sprinkle Dollar," while persistent inquiries on the part of the writer have contributed to keeping the story alive in recent years.

Back in my embryo collector days when the effort to acquire every date of the copper cent was sufficiently absorbing for me not to know or care of the numismatic realms that lay beyond, a business man of the central west wrote to me for information about a silver piece which had been "knocking around" his desk for a number of years. He had forgotten where it came from and had never taken the trouble to inquire about it. He described the piece as about dollar size, an owl pictured on one side, a six-pointed star on the reverse. In later years I had reason to identify this piece as a "Sprinkle Dollar," but from whom or whence the inquiry had come I had forgotten, but knew that my reply had been without any personal interest in the piece. One day, about fifteen years ago, in assorting a lot of old letters I found the owl-star piece inquiry and was in consequence much elated. I hoped that the piece might yet be obtained for editing even if it could not be purchased. Disappointment came in reply to my letter — the piece had disappeared and could not be located. I kept in correspondence with the man and did not give up hope of obtaining it until the day I received a letter stating that he had just discovered that his sons, months previously, had used "the old silver thing that Dad don't want" for a bull's-eye in their rifle target and that it had been shot to bits.

This is the one numismatic "bull's-eye" I have regretted, for I do not doubt that it was a "Sprinkle Dollar," and for which I would now gladly trade the set of copper cents that held my early interest.

To many people the "Sprinkle Dollar" is a fairy-tale or myth, having its foundation in a newspaper article published in 1895 which, so far as I know, is the earliest published reference to it. This article was published in the American Journal of Numismatics, January, 1896, and the Editor's note prefacing it is the only numismatic comment that has come to my notice. The account in the Journal is as follows:

"We find in the Boston Transcript a cutting from the Wheeling (W. Va.) Register, published a few weeks ago, giving an account of some curious pieces which appear to have escaped the notice of American collectors, although the writer calls them 'the famous Sprinkle

Dollars.' The person who put them into circulation seems to have had a private silver mine, somewhere in the northeastern part of Kentucky, near the Ohio and West Virginia line, the product of which he used as money, much in the way that the well-known coppers with the device of an axe, etc., were used by Higley in Connecticut more than a century ago.'' The Register says:

Not long ago a man living in Grayson, Carter County, Ky., received in payment for a horse sold to an old farmer, near the Lewis County line, $46, among which were three of the famous 'Sprinkle Dollars' of the early '30s. It has been more than twenty years since any of these peculiar coins have been found in this section and the production of these will recall a queer character who flourished in the early part of the century, Josiah Sprinkle, who lived in one of the roughest sections of Lewis County. One day he appeared in Washington, the county seat, with a buckskin pouch full of silver dollars of his own make. In every respect they appeared the equal of the national coin. The weight was more and the quality and ring of the metal were all that could be asked.

The inscriptions on the coins were rudely outlined, and no attempt was made at imitation of the legal coin. Rudely outlined on one side was an owl, while a six cornered star showed with more accuracy upon the other. The coins were considerably larger than the regulation article, and thicker as well. Upon various occasions Sprinkle afterwards visited the town, and spent them more and more freely. At one time he volunteered the fact that he had a silver mine in the hills, but no one ever succeeded in inducing the old man to reveal his secret.

Finally the government agents came on to investigate, Sprinkle was arrested and brought into court, but the dollars were proved to be pure silver, without alloy, worth, in fact, a trifle more than a dollar each, and after an exciting trial he reached down in a cavernous pocket and drew out a bag of fifty of the coins and promptly paid his attorney in the presence of the astonished officials. Sprinkle was never afterwards bothered, and continued until his death to make the dollars, how and where no one ever knew.

The Numismatist, November 1895, published a similar article, credited to the Washington Post, but made no comment in reference to it. This article contains some additional details of description and is herewith reproduced:

I saw by the papers the other day where three of the famous 'Sprinkle Dollars' had shown up, said F. D. Strowbridge of Peoria, Ill.

Do you know what the 'Sprinkle Dollars' were? No.

Well, Josiah Sprinkle, the man in question, lived in one of the roughest sections of Lewis County, Ky. Washington, the county seat of Mason, was then a thriving town. One day Sprinkle, then an old man, appeared in Washington with a buckskin pouch full of silver dollars of his own make.

In every respect they appeared the equal of the national coin. The weight was more than at present and the quality and ring all that could be asked for. He spent them freely and everybody accepted them on the assurance of Sprinkle that they were alright, except that they were not made by the United States mint. Upon being asked where he got his silver, he replied, 'Oh! it don't matter. There is plenty of it left.' The inscriptions on the coins were rudely outlined, and in no wise was an attempt made in imitating the national coin. On one side of the coin was an owl, and on the other a six pointed star. The edges were smooth. The coins were considerably larger and thicker than the United States coin. When Sprinkle came to town he spent the dollars of his own make.

At one time he volunteered the information that he had a silver mine in the west, but the old man refused to tell any one where it was located. Finally the government agents heard of the matter and came on to investigate. Sprinkle was arrested and brought into court, but the dollars were proven to be pure silver, without alloy, worth, in fact, a trifle more that $1 each. After an exciting trial he was acquitted. When the verdict was announced Sprinkle reached down in his pockets and paid his attorney in the presence of the astonished officials. Sprinkle was never afterwards bothered, and continued to make the dollars until the time of his death. He died suddenly and carried the secret of his silver mine with him. This was in the early thirties and it has been twenty years since a Sprinkle dollar has been found.

The phraseology of the two newspaper articles reproduced are sufficiently alike to indicate a common origin. Mr. Strowbridge, as quoted by the Washington Post, by his detail of description "edges were smooth," "thicker," etc., indicates he was familiar with the piece.

Parts of the newspapers' tale may be questioned, for it is doubtful if a privately produced coin, if not used for imposition, would at that time (1830) had Government attention.

The Kentucky counties named are in the northeastern part of the state—Mason joins Lewis on the west, and both have the Ohio state line for their northern boundary; Carter joins the southeastern part of Lewis and extends eastward towards the West Virginia line. Washington, Mason County, is now given a population of about 500.

About 1905 a reference to "Sprinkle Dollar" was brought to my attention in a book "Stamp Hunting" by Lewis Robie, published in Chicago in 1898. Robie was a travelling salesman who called on the drug trade in the middle west, and was known as "Doc" by the trade. He was a collector and dealer in proprietary revenue stamps, was well known to the stamp trade of his day and is particularly remembered for many personal references in his book. The book is written in dialogue; on page 70 is found:

Your speaking of stamps made that way, reminds me of the old 'Sprinkle' dollar, a specimen of which I have kept as a curiosity, although I do not collect coins. Do you know what I mean?

No Doc., I don't think I do.

Well they were called the 'Sprinkle' dollars from the name given them by the maker, Josiah Sprinkle, who once owned a silver mine in the West. One day, along in the thirties, he appeared in Washington, his old home, then a thriving town near Peoria, with a buckskin pouch full of silver dollars made by his own hand. They were not counterfeits, but had on one side the stamp of an owl, and on the other side a six pointed star. They were pure silver, weighed more than the regular dollar, and really worth more than one hundred cents. He had no difficulty in passing his coin, but the government found it out one day and caused his arrest for counterfeiting. He was set free, however, as his money in no way imitated Uncle Sam's and besides, it was worth more.

I never heard of that story before, and I should think, Doc., you had a rare coin there.

Yes, it is. A coin man offered me twenty five dollars for it.

I tried to locate Robie by way of his publishers; my letter was returned, written on the bottom — "Present address unknown to us. He has been dead for some time." Later inquiry in Chicago, where he resided, failed to locate his family or any trace of the "dollar." Robie is said to have carried a piece of this description and recited the story as quoted in his book. His story, evidently, was based on the much published newspaper article, he confusing Washington, Kentucky, with a town of the same name located near Peoria, Illinois.

H. G. Brown, for years a popular business man of Spokane, Washington, later of Portland, Oregon, part of whose notable numismatic collection was sold in 1904, always considered an *owl* his trade-mark. During his more active days the question of price never prevented him from acquiring an antique or curio that pictured an owl, or a coin that he desired. He knew the story of the "Sprinkle Dollar" but never succeeded in locating one.

"Sprinkle Dollars" do not appear to be of record in Kentucky state history. An inquiry to the Kentucky State Historical Society, Frankfort, brought the following reply, June 22, 1917:

Your letter in regard to the 'Sprinkle Dollars' received. I have inquired of the Treasurer of the Commonwealth and others, including the oldest bankers of the state, concerning Josiah Sprinkle and the 'Sprinkle Dollars' that you mention, but there is no knowledge of either the dollars or the maker of them.

Lewis County was organized in 1808. At an early day there was in that county and others adjoining the tradition of the 'Swift Silver Mine.' The rich silver mine

has never been located in the mountains of Kentucky, but the Indians hold the tradition that they helped Swift in what is now known as the Josh Bell County to make silver money, and that he stored quantities of it in different places in the Kentucky mountains. Swift had many confederates, perhaps Josiah Sprinkle was one of them.

Can find in our histories nothing concerning him. Kentucky is said to contain in different counties — gold, silver, iron and many kinds of minerals, but not in paying quantities, it seems.

The Kentucky Historical Society was organized at Frankfort in 1836; its existence has not been continuous, there being several periods of inactivity, the present well established and industrious organization dates from 1896 from which date it has been under the direction of Mrs. Jennie C. Morton, Regent, from whom the foregoing information comes.

That a silver piece conforming to the repeated description has existed, there seems no doubt, but as to whether it was associated with Kentucky or a man by the name of Sprinkle is yet to be acceptably established, but the Kentucky Indian tradition of the Swift silver mine and silver money, and what has been published of the "Sprinkle Dollar" indicates that Kentucky or its border neighbors produced and prized something in silver out of the ordinary, which was used for money. The trail of the "Sprinkle Dollar," yet unfinished, directs us to "Swift's Money."

SWIFT'S MONEY.

The effort to obtain information relating to "Sprinkle Dollars," as referred to under that subject, brought to my attention historical references to "Swift's Money" and in seeking the aid of the Kentucky Historical Society, the regent writes:

You are not aware of what a work it would be to write all the important paragraphs in the History of Kentucky concerning 'Swift's Silver Mines' with which it is presumed Josiah Sprinkle had somewhat to do — as he operated in that part of the state where these mines are said to be located.

Some days past a gentleman from Wolf County, Ky., who lives nearby the wonderful 'melting-pot' used by Swift and the Indians in the making of silver money in early days, said he would write me a description of it. These traditions are known in the mountains — but the silver mines those pioneers in that region are said to have gotten silver from and made money — are yet unknown to the people there.

Lewis County is of the Eastern Ky. mountain counties. In Greenup County, nearby, are the remains of what is believed to be an extinct crater. The depression is curious and the soil around is said to bear wonderful stones of all sizes and colors.

I have from time to time been written to for information concerning the 'Swift Silver Mines,' but as yet can only give the tradition as 'handed down' intelligence. Was offered once a handsome sum if I would visit the regions of a lost 'Silver King' and make some discoveries there — but I decline to visit the Ky. mountains either as a missionary or a seeker after buried silver. But the quest at my desk is interesting. If I can secure information of the Sprinkle dollar will let you know.

Reviewing histories of Kentucky at the Congressional Library the following pertinent references in Collin's History of Kentucky were noted, and for a transcription of which indebtedness is acknowledged to Hon. William A. Ashbrook, Chairman House Coinage Committee.

Collin's History of Kentucky, Vol. 2, of Josh Bell County, pages 414-415, is copied to wit:

Swift's Silver Mine. — In 1854–5, while making geological investigations in the southeast part of Kentucky, as part of the official survey ordered by the state, Prof. David Dale Owen examined the supposed location of the notorious Swift mine, on the northwest side of the Log mountain, only a few miles from Cumberland Ford, then in Knox, now Josh Bell or rather Bell county. 'The Indians are said, in former times, to have made a reservation of 30 miles square, on a branch of the Laurel fork of Clear creek. Benjamin Herndon, an old explorer, and a man well acquainted with the country, guided him to the spot where the ore was supposed to be obtained by the Indians, and afterwards by Swift and his party. It proved to be a kidney-shaped mass of dark-grey argillaceous iron-stone, containing some accidental minerals sparingly disseminated, such as sulphuret of zinc and lead — which proved, on examination, to be a hydrated silicate of alumina. This ore originated in a thick mass of dark bituminous argillaceous shale, with some thin coal interstratified, that occurs about 500 to 600 feet up in the Log mountain.'

Judge John Haywood, who emigrated from North Carolina at an early day to Tennessee, and years after, in 1823, wrote its civil and political history from its earliest settlement up to the year 1796, says of this locality: 'Cumberland mountains bear N. 46 degrees E.; and between the Laurel mountain and the Cumberland mountain, Cumberland river breaks through the latter.' At the point where it breaks through, and about ten miles north of the state line, is Clear creek, which discharges itself into the Cumberland, bearing northeast till it reaches the river. It rises between the great Laurel hill and Cumberland mountain; its length is about 15 miles. Not far from its head rises also the South fork of the Cumberland, in the state of Ky., and runs westwardly. On Clear creek are two old furnaces, about half way between the head and mouth of the creek, first discovered by hunters in the time of the first settlements made in this country. These furnaces then exhibited very ancient appearances; about them were coals and cinders — very unlike iron cinders, as they have no marks of the rust which iron cinders are said uniformly to have in a few years. There are also a number of the like furnaces on the South fork, bearing similar marks, and seemingly of a very ancient date.

One Swift came to East Tennessee in 1790 and 1791, and was at Bean's Station, on his way to a part of the country near which these furnaces are. He had with him a journal of his former transactions — by which it appeared that in 1761, 1762, and 1763, and afterwards in 1767, he, two Frenchmen, and some few others, had a furnace somewhere about the Red Bird fork of Kentucky river — which runs towards Cumberland river and mountain, northeast of the mouth of Clear creek. He and his associates made silver in large quantities, at the last mentioned furnaces; they got the ore from a cave about three miles from the place where his furnace stood. The Indians becoming troublesome, he went off; and the Frenchmen went towards the place now called Nashville. Swift was deterred from the prosecution of his last journey by the reports he heard of Indian hostility, and returned home — leaving his journal in the possession of Mrs. Renfro. The furnaces on Clear creek, and those on the South fork of Cumberland, were made either before or since the time when Swift worked his. The walls of these furnaces, and horn buttons of European manufacture found in a rock house, prove that Europeans erected them. It is probable therefore that the French — when they claimed the country to the Alleghenies, in 1754 and prior to that time, and afterwards up to 1758 — erected these works. A rock house is a cavity beneath a rock, jutted out from the side of a mountain, affording a cover from the weather to those who are below it. In one of those was found a furnace and human bones, and horn buttons supposed to have been a part of the dress which had been buried with the body to which the bones belonged. It is probable that the French who were with Swift, showed him the place where the ore was.'

A Memorandum of John Swift's Journal has fallen into our hands, which is an exceedingly curious document; it has the appearance of being a copy of a portion of the same document referred to above by Judge Haywood. It describes with some minuteness the journeys of 1761 (which began at Alexandria, Virginia), 1762, 1764, 1767–8, and 1768–9, and alludes to three other trips of which he kept no account. 'On the 1st of Sept. 1769, we left between 22,000 and 30,000 dollars and crowns on a large creek, running near a south course. Close to the spot we marked our names (Swift, Jefferson, Munday, and others) on a beech tree — with a compass, square, and trowel . . . . No great distance from this place we left $15,000 of the same kind, marking three or four trees with marks. Not far from these we left the prize, near a forked white oak, and about three feet underground, and laid two long stones across it, marking several stones close about it. At the forks of Sandy, close by the fork, is a small rock, has a spring in one end of it. Between it and a small branch, we hid a prize under the ground; it was valued at $6,000. We likewise left $3,000 buried in the rocks of the rock house.' One of the companies in search of the mine was Staley, Ireland, McClintock, Blackburn, and Swift.

This Silver Mine of Swift's has been located by tradition in different counties in eastern Kentucky, from Josh Bell in the south to Carter in the north. The most recent claim is that of the Greenup Independent, in Feb., 1873, of which the following is an extract:

'When Swift was driven from the silver mines in Kentucky, by the approach of hostile Indians, he returned to his home in North Carolina. The money which he had with him created suspicion among his neighbors, and he was arrested as a counterfeiter. In those days there existed no mint in the United States, and the only test of the circulating money was the purity of the metal. Upon the trial of the case against Swift, it was proven that the coins in his possession were pure silver, and the charges were dismissed.

'The ancient tools and instruments used for coining money, which fell from a cliff in Carter county were seen and examined by men now living. These men are highly respectable and entitled to full credit, and they vouch for the truth of the statement. One of the settlers of the county found near his cabin a quantity of cinder, of such unusual color and weight as to induce him to have it tested by an expert. This was done, and the result was a considerable amount of pure silver, which at his instance converted into spoons; these spoons are still in the possession of the family.

'Several years ago, a couple of Indians, from the far West, visited Carter county, and acted in such a manner as to excite the attention of the citizens. They remained for a considerable time, and were continually wandering over the mountains and making minute examinations of the country along the small streams. When about to leave, they told an old gentleman with whom they staid that they were in search of a silver mine which the traditions of their tribe located in that section of Kentucky; but they were unable to find it, owing to the changed condition of the country.

'At an early day, silver money was in circulation in the settlement of what is now West Virginia, said to have been made by Swift. It was free from alloy, and of such a description as to indicate that it never passed through an established mint.

'A bar of pure silver was found many years ago near a small mill in Carter county, which was thought to have been smelted from ore obtained from the silver mines said to exist in that country. And, within the past few days, a piece of ore which has every appearance of silver ore, and a small quantity of metal which is said to be silver, was shown by a gentleman of undoubted veracity, who testifies that he got the ore in the mountains of Kentucky, and with his own hands smelted the metal from ore obtained in these mountains.'

That silver in the form of coin was produced in Colonial days by one Swift from bullion obtained from now unlocated sources is accepted as more than tradition; what the coins looked like or the relation of Swift and his "money" to Josiah Sprinkle and his "dollar" are yet to be established.

PORTRAIT RELIEFS, MEDALS AND COINS IN THEIR RELATION TO LIFE AND ART [1]

By T. SPICER-SIMSON

During the last few years the discerning and aesthetic public has shown a considerable interest in portrait reliefs, medals and coins, a delicate and imaginative form of art, which, for so many years has been much neglected. For this reason a small article to encourage this sympathy and understanding should be welcomed if it revealed wherein medals have a just claim to especial attention as works of Art, a claim few recognize to-day, and a majority through ignorance deny.

Before treating the subject of these small reliefs in detail, it would make the usual attitude taken towards this art clearer by touching upon some general questions that prove our aesthetic tastes are determined by deeper and more elemental emotions than any produced by the influences of environment; in fact, extend far back into the dim vistas of time and are subconscious forces of ancestral derivation.

Great manifestations struck terror into the hearts of primitive humanity and still affect the majority of mankind in the same way. As man gains control of natural forces, astonishment or wonder takes the place of fear, which in turn creates a feeling of admiration. This sentiment of admiration indicates a sympathy towards or for some spiritual or material object and as sympathy and appreciation are repeatedly confused with understanding or the actual fact of appreciation is considered sufficient in itself, it is not surprising that anything of heroic size evokes much more general admiration than diminutive objects. To be stimulated by the effect as a whole in the small Arts, and not become absorbed in the detail which is the workmanship, or the anecdote which is literature, requires the development by training of those delicate visual perceptions of rhythm and balance which are dormant in most people.

Coins and medals or small relief portraiture have flourished, therefore, as a High Art only when mankind attained an apogee of culture; the fifth century before Christ, when Greece reached her highest pin-

[1] Read before The American Numismatic Society at its meeting of March 1, 1917.

nacle of civilization; when Rome became the World Empire; and then later when the Arts burst into such brilliant flower during the Renaissance.

Social relations changed very gradually during the golden ages of Art. Society held some ideal which it expressed through the artist's instrumentality; he had neither the time nor the inclination to analyze or philosophize upon his work but left the interpretation to those who appreciated his handiwork. The artist to-day is impelled to express himself in some aesthetic form through the feeling of an individual need alone, instead of being inspired as well through and by a general communal ideal or racial necessity, as in the old days. The majority of our contemporaries are blind to the beautiful outward manifestations of the *spirit* of things and do not believe that Art is a necessity in daily life.

It is the privilege and obligation of the artist to deepen people's vision by an appeal to reason as well as sight. Higher, less materialistic ideals than prevail at present would thus be introduced and fostered, viz., that a work of Art can exist for Beauty in itself without the necessity of pointing a moral or adorning a tale. Until society possesses a greater unity and places a higher value upon the manifestations of the spirit, creating thereby an atmosphere of general admiration for and satisfaction in the things of the mind, men will not be attuned to vibrate with the eternal verities.

To return to particulars. Coins in the form of money are tokens representing the value of objects and were invented to eliminate the clumsy method of exchanging merchandise itself. Small-sized portrait reliefs in circular form are designated medals, though the term medal to the popular mind conveys the idea only of a decoration as a reward. The Italians of the Renaissance who invented the portrait medal as we know it to-day, undoubtedly made use of it more to commemorate a person than an event. Art terminology is usually so vague in meaning it has become the great resource of the smatterer and rhapsodist to the detriment of accurate thought; it is therefore necessary to define what is implied by the words Nature and Art as used in this article. By the term Nature is meant the outward manifestations of the Universe, and by Art, man's special use of the visual impressions of these manifestations.

Any form of Art expression that persists for centuries must have some basic reason for its continuity, and this is the case with the Art of

Medals and Coins. Their regular established form is circular; few of us realize, however, that this contour has not been chosen because it is the traditional shape, but for fundamentally sensuous and especial aesthetic reasons, though, of course an object that is to be much handled should be agreeable to the touch and have no asperities. The diminutive scale of a coin or medal requires that all attention should be directed toward the subject depicted and away from the outline, and it is a fact no outline commands the interest or rivets the attention to the same extent as the circle. It has no angles, no irregularities, and therefore nothing to arrest the eye on any particular part. The outline being equidistant from a certain point we call the centre, at that point will the eye rest. This very suitability of the circular form for small reliefs, which we might describe as its negativeness or inactiveness, is a disadvantage if the human element is lacking. Hence, many artists instinctively prefer an irregular, or rectangular shape to the cold fixity of the circle. This, however, as stated before, will be somewhat detrimental to the subject for the more irregular the outline the greater the emphasis upon it to the corresponding detraction of the relief. The relief, it must be conceded, is a very important factor, for without it the coin, or medal has no excuse for existence. The inscription, or the subject, stamps its use to that finite being man, whose emotions will not be stirred by the subject on a coin or medal unless it has some living quality. Life is movement and change. These attributes can and should be recovered by the artist by the treatment of the relief, the division of space and the direction of the lines of the composition. Consequently the circle need not be mathematically exact, and the subject on a coin or medal, as designed by the artist should not be precisely in the centre, nor conform by its principal lines to the curve of the circle, if it is desired to impart an impression of something vital and possessing character. Within certain confines, through the use of his intellect, man has been given freedom and is not entirely at the mercy of chance; through the strength of his emotions, guided by the intellect and expressed in some outward form, he gains the highest pinnacles of human attainment in Art. Freedom is necessary, but so is control, to make that complex being Man. Within limits clearly defined, all great works of Art conform to the above statement. There must be a harmony between the object depicted, the manner in which it is carried out, the material of which it is made and, in certain cases, the position it is to occupy.

A pattern or design, when formal, calls for a geometrical location of things and if realistically treated living bodies are used, especially if represented in movement, a feeling of discomfort arises because Life is action and variety, Pattern, immobility and repetition. Nature means change, irregularity, unconformity, so if we wish to adapt her creations to some human need, use, or preconceived object of our own, where we feel the necessity for balance, exact division or pattern, we must first interpret the thing chosen to be depicted, humouring the material in which it is to be translated and, in representing the subject, consider the innate elements, such as proportions, movement and line of much more importance than photographic exactitude. The result may be a work of art, whereas, the exact imitation, never! When these qualities are emphasized, spirit and matter harmonize, and homogeneity with diversity arises, which together are always found in the highest Art expressions and form the most important elements of that subtle quality we call Beauty.

It is a trite fact to note that a representation of Nature at a greatly reduced size will not be true even to her outward shell; consequently realism or truth to Nature are most elastic terms, but to say that Nature can be coaxed by affectionate observation to disclose the greater Truth, her inward Spirit, may sound like mysticism. By *spirit* is meant something that the exterior aspect may not always disclose, such qualities as density, softness, hardness or elasticity, not the surface texture. The sagging or festooning of cloth, for example, is so much more significant as revealing the spirit of this particular material than its rough or smooth surface or the pattern on it. The texture, color and sometimes pattern are common properties of all objects, but the lines of draperies speak for it alone. A deeper truth may often therefore be attained through emblematic representation than by direct illustration and the artist becomes a poet as well as an artisan. Even from the modern practical standpoint, it seems unfortunate that symbols should have become almost a dead language; only a few remain which are now generally understood, — the flag, the cross, the dove, and so on. The Lion, denoting courage, the Anchor, hope, and many other pretty conceits have practically vanished, though they stand for an international language. When society settles into a more stable form than exists at present, a general moral and sincere ideal will be found permeating it. Emblems will then be both resuscitated and reinvented to express this new form of relationship between men. Meanwhile, notwithstanding

the modern attitude towards most emblematic figures, it may be just as well not to throw over entirely a language that was once more easily understood by different races than the spoken word.

Portrait reliefs or medals must conform more nearly to the individual peculiarities of the person portrayed than pictorial subjects, compositions or designs representing something less personal. Balance must be obtained without too much formality of pattern or disharmony results between the realism of the face and the position it occupies in the space allotted to it. The great artist adapts the sitter's characteristics and transmutes them by his intellectual perception of form into something possibly more direct and tangible than what is exactly before his eyes, yet in harmony with the psychology of the person portrayed. It requires great discrimination to feel just to what degree formality, another term for order and design, should be carried and realism sacrificed so that the subject will still possess that changeable emotional quality we call Life. It is interesting to note that the spiritual character of the individual, which in portraits is surely of more importance than the exterior shell, may be suggested before a single feature of the face is shown. For instance, by the relief projection. A vigorous relief would hardly be suitable for a poet, unless he were a Walt Whitman; or a low delicate relief for a General Grant; mass gives an impression of strength and aggressiveness, whereas, slight relief, where the background and subject melt together, imparts a sensation of subtlety and tranquility indicating subjective, reflective and tender qualities. The space the head fills in the circle, the position it occupies near or away from the outline, with or without shoulders, may be used to emphasize the character of the sitter, both physically and mentally. The style of the lettering, its size and position, will also influence the onlooker's judgment as to the psychology of the person portrayed, as well as making or ruining the relief as a Work of Art. With all these points to be taken into consideration by the good portrait medallist he must yet not lose the primary reason for the existence of the relief, which is decorative: a quality generally gauged when interest is displayed in the medal by others than friends of the sitter! This should be the ideal of all artists.

In coins and medals commemorating some event, this decorative quality is most essential. Here the problem to be solved differs, for the coin or medal of this class is generally struck in metal from steel dies, and smaller than cast relief portraits. Nearly all portrait medals

are modelled in wax, or some plastic material, then cast in plaster, from which the definite article is either produced by electric deposit processes or cast in lead, bronze, silver or gold. At the smaller scale, the use of different relief to express individual spiritual characteristics could not be grasped, for the eye does not properly visualize a tiny low relief. There is a point where the visual impression is nil and the surface relief quickly worn away by handling. Comparatively high relief on small coins has the practical advantage of durability and legibility as well as an aesthetic appeal.

The question may well be asked,—how is it that our modern coinage lacks in this particular when modern artists acknowledge the beauty of the old Greek coins and have them as examples and as sources of inspiration? Many people criticize our currency for its lack of these qualities and by doing so show that the exigencies of modern commercial society are not commonly understood. A very definite requirement to-day is that money should stack, i. e., one coin stand on top of the other. Weight is an undesirable factor too; yet, for striking in bold relief, thickness is essential. These are some of the difficulties thrown in the way of the modern medallist or die-cutter; he lies between the devil and the deep sea; he is not permitted the thickness necessary for high relief, because of stacking and weight, yet low relief, though it will stack properly, has the great drawback of becoming illegible within a short time. Very naturally it is asked,—can a coin that is both artistic and practical be evolved, or is that an unattainable ideal nowadays? Following along the old lines would be impossible, and therefore all precedents must be laid aside. A novel attempt was made in the gold half and quarter eagles, where the metal has been deeply incised and the form found below the level of the background, somewhat in the style of the Egyptian low relief. But to give harmony between the subject depicted and the method of production the treatment should not be realistic, as it is in this coin, for the harsh and forward-projecting outline is not to be found in Nature; consequently a very formal interpretation is imperative. An effect something like the sparkling Gothic seals should be the result.

Another technical consideration is the enormous stress on steel dies striking millions of pieces. The dies will have to be constantly renewed if the principal relief projections coincide on the different sides of the coin, whereas, by alternating the relief on the reverse, and, *vice versa*, a practical means is found to lengthen the life of the dies. To a gov-

ernment mint this is of immense economic value, for in a great commonwealth like the United States of America the small currency is struck in such quantities that the tower surpassing in height all other New York buildings may be said to have been built with dimes and nickels!

The blow of a modern steel press is so powerful that the molecular condition of the metal is affected throughout, which is easily demonstrated.

A coin of which one surface has been entirely effaced by usage, or purposely effaced with a file, is heated to the red-hot point before being withdrawn from the fire; if it is then examined, the original design will be visible on the effaced side. By dropping the coin in a solution of nitric acid and leaving it an hour or so, when examined with the light at a certain angle, the original design becomes visible. The metal is always unevenly compressed. In the first experiment the molecules expand to their original size and the subject upon the coin becomes legible, though inversely, the most compressed parts, i. e., the hollows, will be seen in relief. The same result is procured by the acid test, for the acid eats away the surface according to the pressure that had been applied to the different parts of the metal.

The importance, therefore, of suitable designs for modern coinage cannot easily be overestimated. All these exigencies, instead of crushing the artist's inspiration, should be, and usually are, the starting point for some original expression in art. The work should be given to the man who admires the spirit of the ancients, but inspires himself from Nature, without imitating her or the mannerisms of the old masters. The necessity of building with clay was the direct cause of the Assyrians devising the round arch, and the demand for higher buildings, the better to express the people's aspiration toward the heavens, is said to have originated Gothic vault construction. These well-known historical instances can be multiplied.

The reducing machine was invented at the beginning of the nineteenth century. All early work was made without its aid. The die-cutter, as he was called, working directly on the small size, could only interpret Nature's form in a simplified manner, consequently, even a poor artist was less likely to make errors of scale. He would not attempt to seize any but the principal or characteristic forms. His drawing may have been incorrect, but a greater effect of harmony resulted than in many of the well-drawn figures by celebrated artists of modern

times. A harmony between the material and the design, a technical sincerity, and a definite scale beyond which the details should be eliminated, are more essential to a medal or coin as a work of Art than either beautiful drawing, accuracy to Nature, or clever technique. When a figure in stone gives an impression of mass there is harmony between the material and the design. Technical sincerity means that the work of art should bear the mark of the principal tool used. The term scale as here used means interesting proportions between one object and another, that each subject should be visible to the naked eye without reference to their actual relative sizes, for it is more important to make a decorative pattern than to give the true relative proportions of the subject depicted. Only the very great master can combine scale and technique, and he often sacrifices the latter the better to honor the material in which his ideas are expressed.

All early struck coins and medals convey a sense of their method of growth and the material of which they are made, and these are qualities to be found in all great works of Art. Handling or technique is, therefore, one of the vital means of disclosing the human element of feeling. In certain articles, such as money or furniture, where the utilitarian nature of the object is of more importance than the aesthetic, it is often the sole means by which the artist can express his personality. We find ourselves unresponsive to machine-made articles for this reason. It follows logically that the greater the number of intermediary processes interposed between the artist and his finished work the less expressive will be the result as a human document. Consequently, a cast medal modelled or cut in relief of the same size as the finished work and a struck coin cut directly in the steel die will give the finest artistic results. This does not imply that mechanical means to shorten labor are debarred, but the artist should put his hand to his work again, examine the result and correct sameness of surface or faults in scale in the final size of the object.

Nearly all contemporary coins and medals are modelled and designed in large dimensions and produced by utilizing the reducing machine, hence the lifelessness of most of them. Even a man like Roty, with his great experience and genius, never thoroughly grasped scale. Chaplain had an instinctive dread of a great difference in size between the model and the reduction, and would carry out his wax-relief portraits very little larger than the reductions that were cast in bronze. The modern necessity for speed has made the reducing machine indis-

pensable, for hand-cutting in steel is a long process. Steel-cutting as an artistic trade is practically dead but a conscientious artist who is not a die-cutter can understand the simplification of form necessary for a coin and the proper scale and relationship of one part of the design to another by making a small model the actual size of the finished work, having it enlarged, and give the decision of form upon this enlargement without elaborating it. When reduced again no disappointment ensues. For example, hair cannot be copied accurately, even life size; hence must be interpreted in strands. Their number should decrease as the size of the medal or coin diminishes. On that account truth to actual relative proportions of objects or their parts must be sacrificed to the need of legibility or for the beauty of the composition as a design. An olive leaf, or an ear of corn, may be of the same size as a human figure on a medal or coin, and will be both decoratively correct and express the idea in a better way. It is a curious fact, the general public looks for exact copies of an object even when the representation is not the same size as Nature. As the effigy of an eagle on a coin is obviously infinitely smaller than the living object, any attempt to give an accurate reproduction of the details would be ineffective; since when the feathers are reduced in size they become so microsopic as to be invisible to the naked eye and a seemingly smooth surface result. The strength and ferociousness of the bird of which the proportions give character, the movement and decorative effect become so much more important than the number of feathers, which we leave to the naturalist to numerate. This holds true of the details of a man's figure on a small coin.

The time will come when humanity will realize that truth in Art is relative; that Life, being a persistent modification and variation, our progressive development both in Life and Art is a balance between emotion and self-control and make a living art if combined with innovation and originality, which are but other names for individuality. Tradition alone cannot keep art alive any more than the exclusive development of individualism. The former dies of inanition, the latter of a hectic fever.

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AES SIGNATUM

By T. LOUIS COMPARETTE

I.

As in almost every other field of human knowledge so in Numismatics there are several unsolved problems which have been discussed so often that one feels inclined to make some sort of apology to readers of a journal when he essays further discussion of them and ventures yet other solutions. But as a defense of one's temerity in asking their attention to further consideration of one of these apparently unsolvable problems, one may always urge the very common experience that when by general agreement a problem has been practically given up as defying solution "in our present state of knowledge" somebody promptly puts forth the correct solution, or when something is declared impossible to do somebody does it. No hope is entertained for such happy results from this paper, which aims at being nothing more than suggestive.

Among the difficult subjects with which the student of Roman coinage has long struggled is the perplexing question of the origin and use of that considerable number of large bronze bars that have been found in various parts of Italy and generally known as *aes signatum*, a question which seems to be almost as far from a satisfactory answer as it was before a large number of distinguished scholars had made it the subject of thorough investigations. And, indeed, no explanation of these bars may ever be given that will appear to be so sensible as to merit generally even temporary approval, yet it will always be difficult for the student of Roman coinage to pass over them without turning serious attention to the problems they give rise to, so irresistible is the challenge their great size and the elusive enigma of their apparently significant types make to prove or disprove their purely monetary purpose on the one hand and the meaning of several of those types on the other. In the preceding decade the question of the *aes signatum* came prominently to the front again after for a number of years scholars had apparently concluded that the principal questions of their origin and use had been satisfactorily answered. Few numismatists, if any, doubted

the identity of the heavy bars as specimens of the first Roman coinage. For Pliny tells us, on the authority of Timaeus, that after the Romans had used for an indefinite period amorphous lumps of bronze for money King Servius Tullius issued a currency of bronze marked with a type—*Servius primus signavit aes.* Now here was a number of large bronze pieces marked, some of them, with very interesting types, and with considerable alacrity numismatists and historians came to the conclusion that these bars were specimens of that early coinage. Furthermore, amorphous lumps of bronze were found in the territory of ancient Rome and Etruria—the *aes rude* of Pliny or rather of Timaeus! Early tradition was seemingly corroborated by extant monuments and in turn the two classes of objects, otherwise so puzzling, were as completely identified by statements of ancient writers. The reciprocal nature of the evidence made for conviction and if it did not silence interrogation it did restrict the field of investigation. Then, too, the great authority of several modern savants, among them Prof. Mommsen, was added to increase the already general belief that these bars were issued for monetary use, were in fact specimens of Rome's earliest coined money, which remained in use for some time after the introduction of coins proper by the Decemvirs.

In later discussions, however, there have accumulated numerous objections, and some of them apparently unanswerable, to these earlier explanations of the bars, and the objections have gone so far as not only to deny their identity with the *aes signatum* but also to reject the theory that they were of state origin or intended for use as money. But these objections have not been followed by more satisfactory explanations of the bars, though new theories have not been wanting. Because of the doubts thus raised, and probably also because of a certain reluctance on the part of many to give up as unrelated to the Roman series pieces long regarded as forming one of the most important links in its history, the remarkable theories of Dr. Haeberlin in his monograph on *Die Systematik des ältesten römischen Münzwesens* have attracted the greatest attention and in the main have apparently been accepted by many numismatists.

The various theories that have been hitherto advanced to explain these bars may be comprehended under two general heads:

A. State issues for monetary purposes.
   1. Legal coins.
   2. Bars of legal coin-metal; for

(a) various ceremonial and sacred uses;
(b) substitutes for legal coins; and
(c) use in large transactions.

B. Private issues.

1. Private coins.
2. Bars of bronze for export.

The explanation of the bars which I shall venture to suggest has grown out of a distrust of the authenticity of the literary tradition as well as out of the conviction that such pieces were, if not impracticable, yet unnecessary for use as money in Roman territory at the time of their issue, while their types, I believe, warrant their attribution elsewhere than to a mint. It is with the utmost diffidence that an attempt is made to give the grounds for these views.

II.

The literary tradition in regard to the first issue of money by the Romans has unmistakably been a controlling influence over those who have associated these bars with the monetary system of Rome, whether they have held them to be examples of the early *aes signatum* or an echo of that enigmatical coinage issued in later times. For if we take into consideration how recalcitrant the bars have proved at every attempt to account for types and fix the monetary function of those varieties that plainly belong to a late period when Rome was issuing coins properly so called, we are almost compelled to conclude that without being prejudiced by the literary tradition no numismatist would have thought of regarding them as money, much less as coins.

The authenticity of the literary tradition, therefore, becomes of great moment when one would propose a theory of the origin and purpose of the bars. And this question of authenticity is a delicate one. For experience has shown that in almost every tradition, however absurd it has been made by distortions and foolish additions, there is generally a kernel of historic truth. If, therefore, the statements of Varro, Pliny, and Plutarch could be shown to be based upon a proper tradition one would hesitate to reject the theory that these large quadrilateral bars are examples of the earliest Roman coinage they mention, or had some historical relation to that coinage, though the tradition does not state that the *aes signatum* was of quadrilateral form and though the types of the extant bars do not conform to the meager descriptions given by those writers.

The few statements that have come down to us regarding the beginnings of Roman coinage afford but little material for determining whether we have to deal with an actual tradition, as the term is generally understood, or, as in the accounts of other Roman institutions, with the invention, at a comparatively late period, of some fertile imagination. But if, as seems to be the case, Timaeus of Tauromenium, is the earliest writer to give an account of that alleged coinage, then there is room for grave doubts, owing to his unfavorable reputation as a historian. And while it cannot be established beyond dispute that Timaeus was the sole authority upon whom the Roman writers depended for their account, yet what evidence we have for the source of the supposed tradition points to the Tauromenitan.

Now Pliny mentions Timaeus as the authority for the story in a well-known passage which is one of the chief literary evidences for the Servian coinage: *N.H. XXXIII, 3—Servius rex primus signavit aes; antea rudi usos Romae Timaeus tradit. Signatum est nota pecudum unde et pecunia appellata.* While Pliny refers to Timaeus as his authority for the account, yet it does not necessarily follow that he drew it directly from the writings of Timaeus; it is rather more probable that he found the passage in Varro's *Antiquitates* from which he is known to have copied so freely; and that impression is further confirmed when one compares Pliny's brief statements about the types of the Servian coinage with allusions to them in extant works of Varro and notes the similarity of expression. For example the expressions in Varro's *De Re Rustica,* II. 1, 9: . . . *quod aes antiquissimum, quod est flatum, pecore est notatum;* and *De Vit. P.R.I.* (Nonius, p. 189) *aut bovem aut ovem aut vervecem habet signum,* probably disclose where Pliny got his statement: *Servius rex ovium boumque effigie primus aes signavit* (1: Pliny, *N.H. XVIII, 12*) as well as the quotation given above. And for the same reasons the statements of Plutarch, such as *Poblicola 11— —τῶν νομισμάτων τοῖς παλαιοτάτοις βοῦν ἐπεχάραττον ἢ πρόβατον ἢ σύν*— are likely to have been extracts from Varro's works, from which he also drew heavily, though perhaps indirectly, for his material on the early history and life of the Romans. Of course, if Pliny did copy his account from Varro there can be little doubt that he found the statement there also that Timaeus was the authority for it, and that is the commonly accepted view. On the other hand, that Timaeus was the sole authority for the story cannot be established, but that he was the chief authority seems quite beyond doubt; for in spite of his peculiar methods, or lack of

method, in compilation it is unlikely that Pliny would have failed to mention a better, particularly some Roman, source for the story had such been known to him.

The name of Timaeus in connection with the tradition casts suspicion upon its authenticity and brings up the question whether we have not to deal with a pure invention. It seems to be the view of Prof. Pais that Timaeus was romancing on the subject of the Servian coinage and that Varro either accepted the fiction or followed the example thus set him.[1] And it is, moreover, just the sort of historical invention we should expect from Timaeus, judging from ancient, and also modern criticism of his works. For instance, it would agree with the estimate Polybius gives us of Timaeus in his Twelfth Book, wherein, though perhaps inspired to some degree by personal motives, he yet successfully impeaches him of lack of conscientious scruple for historical truth, and also of a readiness to publish as facts his personal views falsely authenticated by fabricated conversations and imaginary monuments. Prominent among the vices Polybius convicts Timaeus of is his lack of reliability when dealing with the origin, primitive history, and peculiar customs of peoples. Illustrations of this pseudo-antiquarian interest of Timaeus are given by Polybius in which he shows that the writer was either unpardonably ignorant or deliberately mendacious, with the weight of evidence preponderantly in favor of the latter.

Because of this tendency to write with confidence about what he did not know or to misapply the knowledge he had gathered Polybius particularly impugns the value of Timaeus's "account of Libya, Sardinia, and, above all, of Italy"—a hint which is of special importance in connection with the subject of this investigation. In a word, Polybius, one of the most careful historians of antiquity, charges that Timaeus had no hesitancy to resort to fiction and deliberate falsehood. Strabo also has several times questioned the accuracy of Timaeus's statements on important matters, and likewise Diodorus Siculus; while among modern critics his value as a historian is summed up by Mommsen who says of him: "He was one of the historians who upon no matters are so well informed as upon things unknowable."

Such was the character of the historian to whom we apparently owe the earliest known account of the coinage by Servius, the perplexing *aes*

[1] Pais *Storia d. R.* I, 2, p. 406, n. 2. Mi limito solo a notare che nulla vieta pensare che Timeo abbia favoleggiato sulle monete di Servio e che alla sua volta fosse seguito in questo caso da Varrone.

signatum. And while Timaeus may have gathered his account from current tradition, yet he was plainly not incapable of inventing it, and if sufficient motives can be found for such a course, I believe that we are warranted in concluding that he did invent the story; and for a writer like Timaeus the motives were not wanting.

The conditions under which he wrote were such as to invite extravagance from a pen uncontrolled by severe regard for historic truth. The steady advance of the Romans toward the Greek cities of Italy, and especially the defeat of Pyrrhus, had greatly impressed the eastern Greeks and created a keen interest in the new power rising in the West. But the history of the Romans was but little known to the Greeks; it had never been written. Fully conscious of all this Timaeus, probably the first to write a history of the Romans[1], wrote the early history of the city of Rome; and the opportunity which a new field and a keenly interested reader offered his style, it was Asiatic,[2] was not lost by one so apparently ready to sacrifice historic truth to lively narrative.

The immediate inspiration for an account of Rome's first attempt at coining money would have been readily given by the interest which may well have been aroused by the introduction of the first, the well-known heavy bronze, coinage (B. C. 335), and later (B. C. 269) of the first silver coinage by the Romans; for both of those coinages were introduced in the lifetime of Timaeus.

Furthermore, the chief motive of the fabrication, if such it was in substance, and the sources of some of the material that was woven into it, are perhaps not far to seek. It is well known that very much of the early history of Rome, as we find it recorded by Livy and other writers, is not authentic, some of it having been invented by early annalists to explain existing institutions while much of it was undoubtedly appropriated or imitated from the earlier history of other great states, especially of Athens. In particular Professor Pais points out how the Hellenic and Roman historians copied their accounts of the reign of Servius Tullius from the record of the legislation of Solon,[3] who was almost his

[1] Dionysius of Halicarnassus, I. 6. [2] Cicero, *Brutus*, 325.

[3] Pais, *Storia di Roma*, I, 2, p. 570: — Nella Storia di Servio Tullio è lecito forse constatare anche altre correnti elleniche. Questo re, che sostituisce ordinamenti timocratici alla antica costituzione genocratica, che abolisce l'usura, distribuisce le terre ai poveri, favorisce gli schiavi, che è autore del censo, della legge agraria, di contratti, che pubblica le sue leggi, dal lato storico e cronologico è una copia di Solone, che visse verso gli stessi decenni e che fu realmente l'autore della "seisachteia," Solone anzi, stando alla storia tradizionale, sarebbe stato l'autore in genere di tutti i provvedimenti che vengono pure attribuiti al sesto re romano. Si mirava ad attribuire anche a Roma i fatti più salienti della storia ateniese, della città principe della Grecia.

contemporary. And since one of the important features of the legislation of Solon was the reform of the monetary system of Athens, so in the parallelism an epoch-making monetary event was needed for the reign of Servius. For that purpose the story attributing the first coinage of money by the Romans to that king served well indeed.

The parallelism is further established by the general character of the types attributed to the first coinage by the Romans wherein the account follows rather faithfully the ancient legend about the first Athenian coin-types. For there was a tradition, mentioned by Plutarch and Pollux, that the earliest coin-type of Athens was an ox. The types of the supposed *aes signatum* included the ox, hog, and sheep. The greater variety of types assigned to the earliest Roman coinage might well be due to what was doubtless a simple fact and well known, that at an early period, perhaps in the regal period, and probably for some time thereafter, the wealth of a Roman consisted of lands—he was *locupletes*—and his ready funds, of cattle, sheep, and hogs; with the latter, for instance, he paid his fines: *multaeque dictione ovium et bovum, (quod tum erat res in pecore et in locorum possessionibus, ex quo pecuniosi et locupletes vocabantur) non vi et suppliciis coercebat. Cic. De Leg. II, 9;*)[1]— and thus to represent Rome's first coined money as reproducing in its types the animals that before had been used as money would not only parallel the early Athenian tradition but by showing an apparent development from earlier Italian conditions would give the bit of "history" a desirable plausibility.

Now if there is some ground to suspect the authenticity of the story preserved by the writers because of the character of the earliest known source of their statements, there is another fact that must not be left out of consideration and one that cannot but cause grave doubt as to the truth of the supposed tradition. This fact is that no specimens of Roman bronze coins have come to light that correspond either as to types (with a possible single exception) or to period of origin with the *aes signatum* of that tradition. We have one specimen with an ox-type on both sides, but it is evident, and so agreed, that the piece is not Roman but Greek in style of art nor is it of earlier origin than the first issues of the Roman heavy round coins, probably not so early. As is well known, owing to the ancient practice of burying coins and other objects of value, no other class of monuments relating to the history of man exists in

[1] See also Varro, *De R. R. II*, 1, 9: — Multa etiam nunc ex vetere instituto bubus et ovibus dicitur.

greater numbers than, or in so nearly unbroken series as, coins. Specimens are extant of what was doubtless the very earliest issues of coins in western Asia and Europe about 700 B.C., remains of what could hardly have been very considerable coinages. And while doubtless specimens of the first and scanty issues of certain states are yet wanting, still it is almost impossible to point to an ancient coinage that was extensive or long continued of which specimens are not extant and sometimes in enormous numbers. If, now, we accept the traditional date for the beginning of Rome's first coinage, the so-called *aes signatum,* or if the first issue of that coinage be attributed to the period of the Decemvirs, then for at least a century or until the accepted date (B. C. 335) when the prow-series was first issued, that rising state issued coins bearing the types of the ox, hog, and sheep; and since, we must infer, Rome issued no other bronze coins, we should be compelled to conclude that the annual coinage of such money was considerable, while the aggregate volume that would naturally accumulate in the course of so long a period would necessarily become enormous. Yet no examples of that alleged early coinage, no pieces bearing such types and attributable to that period, have ever come to light! And there is no reason why specimens of it should not have been found in buried hoards and sacred deposits that have been unearthed in Italy. In fact we have many specimens of what numismatists choose to call the earlier *aes rude,* mere amorphous lumps of bronze. And if these lumps of bronze do represent the *aes rude* of the tradition then we are in the singular position of having examples of the very earliest and crude Roman metallic money, but probably none of the later money bearing a mark (*signum*). This would certainly be a rather unusual situation!

This failure of the finds of ancient coins in Italy to corroborate the statements of the writers as to the *aes signatum,* while in a way negative evidence, yet when considered in connection with other arguments, can hardly fail to prove damaging to any theory that in this tradition relating to Rome's first coinage there is a kernel of truth.

So much for the supposed tradition which certain writers have preserved in regard to the first issue of money by the Romans. The tentative conclusions reached as to the authenticity of that tradition cannot but be in a measure confirmed, or weakened, by consideration of some of the arguments by which investigators have sought to establish the identity of extant bars with the *aes signatum* of the writers or at least to show that they were somehow historically related thereto, and also by a study of those bars themselves.

III.

The numerous varieties of extant bars do not admit of satisfactory classification on the basis of chronology, composition or any other principle on which coins are generally classified, except in part by the unsatisfactory geographical distribution, determined, not as in the case of coins, by the known or probable places of issue, but merely by the general locality in which they have been discovered. Thus Dr. Haeberlin in his monumental work on the *Aes Grave* makes a classification of them that represents fairly the consensus of opinion on the subject; his three classes are:

1. The north Etruscan bars, with iron alloy.
   Types: dead branch (*ramo secco*) or plain.
2. The decorated bars of northern Central-Italy.
   Types: fish-skeleton, dolphins, twigs with leaves, and crescents.
3. The Romano-Campanian bars, of which there are so far known nine varieties.

   Types:
   1. Eagle on fulmen. — Pegasus; ROMANOM.
   2. Shield. — Shield.
   3. Sword. — Scabbard.
   4. Barley-ear. — Tripod.
   5. Anchor. — Tripod.
   6. Trident. — Caduceus.
   7. Cocks and stars. — Rostra and dolphins.
   8. Ox. — Ox.
   9. Elephant. — Sow.

This classification has almost no scientific basis and is at most a mere convenience of questionable value. For provenience alone is not a safe guide to the actual origin of antiquities as has been shown in more than one instance, and strikingly by the error of attributing the thousands of Greek vases found in Etruria to local makers. It is improbable that the bronze bars found in Etruria and elsewhere in Italy present a case parallel to that of the vases, but the mistake made with the latter may well be taken as a warning. And such a caution gains some force when it is considered that in the case of groups 1 and 2 there is not a single type that can be brought into relation with an Etruscan community or legend; while the bars of group 3 have been ascribed to the Roman mint at Capua chiefly because the artistic quality of the types forbids their attribution to Roman engravers. This attribution Dr. Haeberlin has sought to establish on numismatic and historical evidence, but his arguments are hardly convincing.

In the various discussions of these bars a number of their salient features have been brought out and emphasized, more especially those which must be taken into account on the theory that the bars are coins or in some way by law or custom connected with the Roman monetary system. The mere statement of these facts will not only show why explanations of these great bars have been so varied, having run, in fact, the whole gamut of possibilities from state-issued coins down to mere bars of bronze produced by private enterprize; but it will also present succinctly the chief factors that must be taken into consideration in every attempt to arrive at an explanation of them. The more important if not all of the facts are:

1. The weights of the bars vary greatly, and they are not adjusted to the standard unit of Roman bronze coinage, nor to that of any other Italian community.
2. The composition of the bars differs widely, some having large proportions of iron and little or no lead, others a large percentage of lead and no iron, while still others have varying proportions of tin and lead.
3. The artistic style of the types on several examples shows unmistakably the work of Greek artists and in no case has anything in common with Roman die engraving.
4. Only one of the bars bears an inscription, which is ROMANOM.
5. The majority of the bars have been found in a fragmentary state, deliberately broken it has been claimed and such is apparently the case—a purely incidental fact but one of which much has been made by the advocates of the theory that they were meant for use as money.

Certain alleged characteristics of the Servian *Aes signatum* and the necessary qualities of Roman coins, which the bars do not possess, are:

1. Domestic animal types are found exclusively on but one bar.
2. Archaic art is not found in any of the types.
3. Marks of value do not occur.
4. No recognized coin-types of Rome or of any other Italian community are found on any of them—but one of the bars bears the same devices as are found on the coins of two Greek communities of Italy, the barley-ear and tripod.

The above statements take into consideration all of the bars usually designated *Aes signatum*. And there is no reason why they should not be considered as a whole. For with the possible exception of a single series, those with the so-called *ramo secco* types, these bars cannot be

classified chronologically into widely separated groups; they are for the most part contemporary. Willers places the issue of the *Fischgräte* bars between B. C. 325 and 250, while two other varieties, the one with the crescent-shaped types, the other with "marks of value" (Pl. VIII, 1 and 2), he dates to almost the same period, *i. e.,* B. C. 300-250. While I believe there are good reasons to doubt that the production of the bars ceased round B. C. 250, it is very probable that the *terminus post quem* given by Willers is approximately correct. And it is generally conceded that the bars which bear types in the fine style of Greek art belong to about the same period, being assigned by most writers to B. C. 312 to 269. So, then, if the bars belong to the same general period and especially if they were state issues for any special purpose, we should be justified in expecting them to possess common characteristics as do the coins of several cities in the same country and of the same period.

The bars that have received by far the most attention are the so-called Romano-Campanian group, evidently because their splendid types seemed to assure for them a noble origin and purpose and apparently afforded, in some cases at least, historical and other data, while without doubt the un-Roman, plainly Greek, art of their types gives rise to special difficulties. It is with these nine bars that Dr. Haeberlin deals so ingeniously in his *Systematik,* where he presents a theory that at present overshadows all other explanations of them. Some of the main points of Dr. Haeberlin's theory in regard to the origin and use of these particular bars are in substance as follows:

1. They date between 312 and 269 B. C.
2. They were issued by the State.
3. They are to be regarded as successors of earlier and cruder bars—*als die verfeinerten Nachfolger der alten Rohbarren zu denken seien.*
4. They were issued from the mint at Capua, which was served by Greek artists.
5. Seven of the bars were issued in connection with as many series of coins proper.
6. They were not coins, but bars of coin-metal, the fineness of which was guaranteed by the State's type—*bestehen die campanischen Barren aus Münzmetall.*
7. They were intended to serve all the purposes that the earlier *aes rude* and cruder *aes signatum* had served, such as (a) monetary purpose; consisting of coin-metal and issued by the state the bars possessed the proper qualities of money—*sie besitzen demnach die wesentlichen vom*

Gelde zu erfordenden Eigenschaften und wenn es neben ihnen kein gemünztes Geld gegeben hätte, so waren sie unzweifelhaft geeignet an Geldesstatt zu dienen; (b) ceremonial purposes, in transactions of *emtiovenditio per aes et libram, mancipatio,* and for *aera stipata,* and possibly the fragments for *tesserae hospitales.*

As to the period when these bars had their origin there will be no dispute, for the artistic style of their types bring them well into the fourth century. But on nearly all the other points of Dr. Haeberlin's treatise there is room for endless argument. Thus we know nothing of the earlier crude bars to which these Campanian examples are supposed to have succeeded; and that such bars had ever been issued in southern Italy seems to have been inferred from the existence of cruder ones found further north. And yet, while the types of the latter are less elaborate and significant, and perhaps less artistic, than those of the nine bars in question, it is by no means certain that the northern bars are of very much earlier date.

As to his contention that the bars were issued by the state and from a government coinage mint, that is established by the relationship claimed for several of them with certain series of alleged Roman silver and bronze coins. This connection is based largely upon internal evidence afforded by the types. Both of these questions will come up in the discussion of the types of some of the bars and might, therefore, be passed over here. But there are one or two general observations bearing upon that question that may as well be made now.

The evidence upon which their state origin is chiefly based is apparently the presence of the inscription ROMANOM on one variety of bar, the one with the eagle-pegasus types. That inscription has been the real nexus between the literary tradition about an early *aes signatum* and these great quadrilateral bricks. Romano-Campanian silver coins of about the same period bear the genitive case form ROMANO and it has been generally accepted that the inscription on the bar pointed to the same authority. But the presence of that inscription on a single variety of the bars can be used as evidence against, as well as for, the view that they were issued by Roman state authority; perhaps with even greater force against it. For the presence of the inscription on but one variety does not point to an identical authority for the issue of all of them; it rather suggests different sources. Had all the nine bars of the "Romano-Campanian" group been issued from the Capuan mint and within a very brief period of years (B. C. 312 to 269), as Dr. Haeberlin

contends, it seems incredible that there should not have been greater consistency in the use of inscriptions. This objection gains force when it is considered that the inscription ROMANOM is found on the only bar that bears what might then have been recognized as a Roman type, the eagle and fulmen of Jupiter. Were that inscription found upon one of the bars with apparently non-Roman or non-Campanian types the exception could then feebly be explained as having been necessary in order to guarantee its Roman origin.

It is difficult, therefore, to see how this inscription can be regarded as evidence that the bar was issued by Roman state authority. Another view of the significance of that legend will be given below where the eagle-pegasus bar is discussed. But whether the meaning of the eagle-pegasus types and ROMANOM there given be acceptable or not the objections to the usual interpretation of the legend as designating the Roman state authority are too serious to be overlooked.

Attention also may be called to the frequent changes in the types of both the coins proper and of the bars which the theory of Dr. Haeberlin requires. For according to that theory there were six radical changes in the types of the bronze coins issued by Rome from the Capuan mint in the short period between B. C. 312 and 269, and one of the series was issued in two varieties; while in connection with each series of coins a bar of distinct type was issued. This frequent change of types is not only remarkable and almost without parallel in any other country, but such a practice is decidedly un-Roman. The subsidiary bronze coins of many of the Greek states show great variety of types, but it is questionable if in any place the changes followed in such rapid succession as that supposed for these heavy bronze coins of much higher value and which, at first certainly, were not subsidiary. In the case of the undisputed Roman bronze coinage the practice was just the opposite. For the types of the prow-series persisted for centuries. Moreover, in the case of the bars, that rapid succession of new types is carried still further, for Dr. Haeberlin holds, that in addition to the seven bars issued in conjunction with and as a part of as many series of silver and heavy bronze coins, two additional bars were issued within the same period with new types commemorative of historical events! Such a view of the production of the bars is no less discordant than their novel devices with that spirit of Roman conservativeness that, it is claimed, would not employ the new bronze coins for ceremonial and religious uses because they were an innovation (eine Neuerung).

Among numismatists the view has generally prevailed that the bars were issued for use as money and are either coins, the *aes signatum,* or at least money in the wider sense of the term; and their efforts have chiefly been directed to showing just what the status of this money was in the general monetary system of the country. For example, it was the opinion of Mommsen that the bars were a sort of coin issued under the direction of the Roman government and, with or without legend, circulated in about the same manner as the coins proper of later times; while Professor Milani[1] went even further and attempted to fix the denomination of the bars as Quincussis. Perhaps few persons, if any, would still hold to the earlier belief that the bars are coins, but the statements of some writers about them are unfortunately so ill-guarded as to lead one to surmise that their real convictions do not altogether square with the theories to which the logic of facts has driven them. But the notion that the bars are coins has been necessarily given up because they lack the requirements of coins proper, especially of Roman coins. Thus their weights are not adjusted to the Roman or any other coinage unit,[2] so that they could not pass by tale at an average value guaranteed by the state, which is the chief function of a coin proper; and they bear no marks of value, while from the first Roman bronze coins as well as those of other Italian states did bear marks of value.

The theory, therefore, that the bars are coins has given way to the view that they were intended for use as money only in the broad mean-

[1] *Rivista Italiana di Numismatica*, 1890.

[2] The weights of 25 specimens of the Romano-Campanian bars show a wide variation, the discrepancy between the lightest and the heaviest reaching several hundred grammes and is over 200 grammes above and below the average weight. The following schedule of weights show how they vary:

TYPE.		Weight in grammes.	TYPE.		Weight in grammes.
Eagle — Pegasus	1	1642.00	Caduceus — Trident	14	1686.35
	2	1542.00		15	1679.50
	3	1394.60		16	1628.00
	4	1389.63		17	1614.00
Shield — Shield	5	1623.30		18	1141.50
	6	1580.00	Cocks — Rostra	19	1525.25
	7	1516.00		20	1491.76
Sword — Scabbord	8	1618.00	Ox — Ox	21	1790.23
	9	1593.69		22	1624.50
Tripod — Anchor	10	1830.05		23	1389.90
	11	1677.20		24	1347.00
	12	1543.70		25	1746.49
	13	1495.06	Total weight		39,109.71

Average weight, 1564.39 grammes.

ing of that term. In this wider sense of money Willers[1] and Dr. Haeberlin[2] hold that the bars are of coin-metal and as such were guaranteed by the state, so that they could be used to make payments when it happened that no coins proper were at hand. Not very materially different from this view is the suggestion of Dr. Regling,[3] who rejects the Haeberlin explanation that the bars were also intended for ceremonial uses, but agrees that they were a convenient form of coin-metal, of a fineness guaranteed by the State's type or the inscription ROMANOM, and were intended for use as money, evidently in transactions involving the payment of large sums, similar in character to the bars of the precious metals issued from the mints of Europe in the Middle Ages—a view that is perhaps influenced by the practices of modern international commerce wherein large sums in gold bricks are frequently transferred in the settlement of trade balances.

This theory of the bars assumes that the Romans lacked an adequate supply of coined money, a condition that must have prevailed also or especially in the newly conquered territory; and so recourse was had to issuing of bricks of bullion to eke out the volume of currency; Nur grosse und einschneidende politische Umwälzungen konnten eine fundamentale Reform dieses durch den Mangel der Münze characterisirten Zustandes Mittelitaliens zur Folge haben u.s.w.[4] And this is the only rational ground upon which the theory can be based; for it would be absurd to contend that the people inhabiting those countries insisted upon retaining a crude and unwieldy form of currency when the infinitely greater convenience of coins proper had been long known to them or that Rome was ready to humor such an impracticable whim!

There is, however, no evidence that the volume of coined money was inadequate either at Rome or in the conquered territory. With the knowledge we have of how in antiquity comparatively backward communities made use of the coins imported from more advanced states it would be a mistake to suppose that Roman domestic trade was served only by her own alleged makeshift currency prior to about B. C. 335.

[1] Willers, *Numismatische Zeitschrift*, 1905, p. 13 f.

[2] Haeberlin, *Systematik*, p. 57.

[3] Regling, *Klio*, 1908, p. 501: — Auch der Gesamtsauffassung Haeberlins von den Barren . . . vermag ich mich nicht anzuschliessen, halte die Barren vielmehr für Rohmaterial, das, in handliche Form gebracht und hinsichtlich der Feinheit als Münzmetall vom Staate durch das Bild bezw. die Aufschrift ROMANOM garantiert, jederzeit als Geld zugewogen werden konnte.

[4] Willers, *loc. cit.*

or thereafter only by her new and proper bronze coinage. The states on her narrow confines north and south were at that early period coining money, and of the precious metals too; while the aggressive commerce of several great Greek and Asiatic states had pushed its way throughout Italy and where that commerce went their gold and silver coins went with it. It would certainly be contrary to the usual practices everywhere, in both ancient and modern times, had the Romans failed to make extensive use of coins struck by other peoples. It is more likely that an abundant supply of such currency for her domestic trade was a factor in postponing somewhat the introduction of a national coinage or in restricting the national coinage to bronze for so long a period of time; for coins imported through the channels of commerce would be solely of silver and gold.

Furthermore, at the very time when it is urged that these bars were being issued by Rome necessarily to supplement the volume of coined money, the other States of Italy were evidently well supplied with the precious metals. For M. Babelon in discussing the abundance of the precious metals in antiquity[1]—in the course of which he makes the interesting and probably correct statement that the volume of such metals in antiquity was likely as great in proportion to the population using money coined of gold and silver as it is today, or even greater—in reference to Italy shows that the States of the peninsula were not exceptionally poor in these nobler metals. For in B. C. 293 Papirius Cursor collected a booty of 1,830 pounds of silver in his campaign among the Samnites, (cf. Liv. X 46) a very large sum when one considers that Samnium was an inland agricultural country and also that the precious metals would be the first objects which the populace would endeavor to protect from the hands of the invader, so that the Roman general secured a very small portion of Samnium's supply of silver; and it is certainly a safe conjecture that the more powerful Rome was much better supplied with silver and gold than was Samnium.

Even less defensible is the suggestion that these bars were intended to facilitate large transactions. For, as Mr. Hill has pointed out, if there had been need of pieces of larger value than the heavy bronze coins for the occasional payment of large sums, the Roman silver Didrachm would have supplied that need far more conveniently than these large unwieldy bricks.[2] And it must furthermore be noted that, so far as it is

[1] Babelon, *Les Origines de la Monnaie*, p. 250ff.

[2] Hill, G. F., *Historical Roman Coins*, p. 16.

implied that the larger pieces of coin-metal would be more convenient than the coins, the bars being only four or five times as large as the libral bronze *As* then in circulation offered but slight advantage in that respect when considered only in respect of the number of pieces required to make up a given sum of money; and far less convenient when the necessity of weighing the bars is taken into consideration. And finally since the speed with which a casting mint operated depended more upon the melting process than the size of moulds the making of the larger bars instead of the libral As could hardly increase the mint's production of money.

IV.

The difficulties in the way of proving that these bars were made for a money use of any sort are so numerous that inevitably the doctrine must be abandoned or greatly modified. And a modification has now been suggested in the form of a theory that holds the bars to be a late continuation or perhaps revival of the old bar-coinage and issued chiefly for certain uses, other than monetary, which had become so deeply rooted in popular usage that the conservative spirit of legal and religious practices required their continuance. Preëminent among the theories of this character is Dr. Haeberlin's, that they were meant to serve those ceremonial uses which the traditional *aes signatum* had probably served, such as the transactions that only could be legally completed by use of a piece of bronze (*emtio venditio per aes et libram*) and also for religious offerings (*aera stipata*). And with this part of his theory the views of Mr. Hill substantially agree: "The question of the use of the bricks must, therefore, be left open; we cannot disprove the theory that they may have been used in large payments, but the theory that they served ceremonial purposes is by far the most plausible that has yet been advanced."[1]

This theory of the bars appears to be in no small degree a last resort in despair of proving for them a sole monetary function. It is difficult, however, to see why the state should find it necessary to issue a special bronze piece for such purposes. There is certainly no evidence from literary sources that a piece of bronze of any special design, form or size was required for these uses; and as for religious offerings, so far as the evidence of what are generally regarded as the finds of sacred deposits gives us any hint, that points to the fact that bronze in any form was suitable for such purposes. For these deposits are a jumble of many forms and qualities of copper.

[1] Hill, G. F., *loc. cit.*, p. 17.

On the other hand, so far as the argument is based upon the usual conservativeness of a people in customs pertaining to such common matters of their daily life as purchase and sale and religious offerings, nine of the bars, the so-called Romano-Campanian examples, hardly favor such a contention. For in their outward appearance, the feature which would most impress the common people, the bars are not of a conservative character; in fact their types are varied and novel and treated in a most advanced artistic style. Besides, had the state issued bars with a view even secondarily to their ceremonial use, it is almost inconceivable that some among so many examples should not have borne a type somehow alluding to such a purpose; but none of these do. Again, had the state issued bronze pieces for such uses, the most popular next to a monetary use, it is certainly improbable that pieces of such high value would have been issued; for the value of these bars runs from four to above five libral Asses, pieces whose purchasing power then was the equivalent of several dollars today. Only the prosperous could have afforded to make use of such valuable pieces for ceremonial purposes. Had a large number of very small bronze pieces come to light in Italy, one should be justified in inferring that they had been made for some such popular uses as proposed for these great bars.

It is true, on the other hand, that the bars are mostly found in fragments; but if it be contended that they were reduced to fragments for the use under consideration, the fact would only prove that any piece of bronze, however crude it might be, would serve the purpose, and that actually pieces much smaller than the extant bars were generally employed. And if that had been the case, the fact would have been well known to the Roman government, who would certainly not have sanctioned the issue of pieces too large and valuable for the convenience of the masses of the people.

The objections that have been urged against the theory that these bars were issued by the State for ceremonial and religious uses may not carry sufficient weight to discredit it entirely, yet until that doctrine has been grounded upon some definite proofs it will be impossible to believe that the Romans ever incurred the unnecesary expense and went to the trouble of issuing a bar that was not needed and in a size that was not practicable.

V.

The theory that these bars were produced by private enterprise and were intended for use as coins or for foreign commerce has recently

been put forward. Thus in a paper read before the International Congress of Numismatists at Paris in 1900 (*I bronzi quadrilateri della republica e la moneta privata dei Romani*) Com. F. Gnecchi advanced the view that these bricks were not issued by the state; (1) because their types do not present the head of a divinity, which is a characteristic of the bronze coinage of the Romans; and (2) because they are quadrilateral in form, while the coins issued by the Roman government, even the large Dupondius, Tripondius, and Decussis, were round. These bars are, therefore, to be considered private coins, a sort of continuation of the *aes signatum* of an earlier period,[1] which is supposed to have been a private issue.

The assumption that the Romans restricted religious types to official coins and would have denied the use of such types to private persons though the latter were allowed to issue, or were not molested in the practice of issuing, coins is without foundation; while at the same time the writer seems to hold that such religious character was conferred only by the use of the effigy of the divinity and to lose sight of the fact that many ancient coin-types present only the symbol of a divinity and are yet properly regarded as of religious character; and among the types of these bars are a number of objects recognized as symbols of divinities. Besides, the cock, hog, elephant, and pegasus types are found on the coins of other states of Italy where because of a common inheritance of religious and social institutions the types of coins were probably regarded much the same as by the Romans. As to Mr. Gnecchi's argument from the quadrilateral form of the bricks, he assumes that the more ancient *aes signatum* of questionable tradition was of private origin, a view that contradicts a part of the same literary tradition which he accepts as to the existence of that coinage, for Pliny expressly states that it was a royal coinage; and also he assumes that that *aes signatum* was of quadrilateral form, which is a groundless assumption.

Least tenable, however, is Gnecchi's conclusion that these bricks were coins produced by private enterprise. For nothing could be more inconsistent with the Roman conception of the State in the fourth century, and probably much earlier, than to permit the individual to compete

[1] Conclusione: questi pezzi, sia pel carattere evidente delle loro impronte, sia per la loro forma, non erano moneta ufficiale dello Stato romano. Cosa potevano dunque essere se non moneta privata?

Come tali non dovevano e non potevano portare impronta religiosa; — lo Stato non l'avrebbe permesso — e come tali, conservavano la forma quadrata, quasi in continuazione degli antichi pezzi di *Aes signatum* i quali indubbiamente costituivano la moneta primitiva e privata dei Romani.

with the sovereign power in the exercise of one of its chief functions—that of establishing a system of currency and coining money. Thus the theory that these bars were privately issued coins or money would but substitute greater problems for the ones whose solution has already proved sufficiently difficult.

Finally, Bahrfeldt (*Eine vorläufige Erörterung der Barrenfrage, Berlin 1901*) influenced apparently by his recent studies of the large find of bars and a great many fragments of bars at Mazin, Croatia, contends that they were not coins, either official or private. The objection to regarding them as coins of any sort is based upon the absence of marks of value. But the reported[1] view of General Bahrfeldt that they were simply ingots of bronze, which formed an article of export to the countries that made use of bronze, is, I believe, true in part. But there is no reason to believe that they were meant only for export; while there are reasons to believe that the ingots of bronze transported in foreign commerce were much larger than these bars.[2]

It appears, therefore, that the various efforts to associate these bars with the Roman coinage have served chiefly to emphasize the difficulties in the way of such explanations of them and to point out how far their characteristics remove them from a monetary use. In the case of the types, it is a noticeable fact that, with exception of but one or two varieties (such as the Hog-Elephant bar), whose certainly erroneous interpretations have been generally accepted, the very few writers who have attempted to solve the riddle of their meaning have found themselves compelled to have recourse to broad and general notions, to which the types do not with clearness allude, and seldom have found the meaning in facts and events readily symbolized for the masses of the people by such devices as occur on these bars; whereas antique coin-types, and also a rather wide range of purely artistic representations, generally have for subjects religious notions, myths, or events that were well known to the people and therefore readily suggested by a simple symbol.

Any theory of the bars to be worthy of consideration must be free of these fundamental grounds of objection.

[1] I have to acknowledge regretfully that I have not had Bahrfeldt's paper to read, but have necessarily depended upon brief notices of his argument.

[2] Many large bronze ingots have been found, 19 at Hagia Triada with an average weight of 29231.6 grammes, and 17 in the sea near Chalkis whose weights range from 5350 to 17000 grammes; while three Sardinian ingots, which were probably imported from Cyprus, are reported as averaging 31233 grammes in weight. See Evans, *Corolla Numismatica*, p. 358ff.

VI.

On the basis of the artistic character of the types the extant bars may be classified into two groups, Greek bars and Italian bars. The former embraces the examples, nine in number, with types which are plainly the work of Greek artists; while the latter class includes all others, in whatever parts of Central Italy and Etruria they may have been produced.

Now, since the former group are plainly the work of Greek artists there is that one good reason for looking to Greek communities for their origin. Moreover, this group is distinct from the other bars not only in respect to their utterly un-Roman types but also as regards their composition. It seems proper, therefore, that the possibility of their having originated in Greek communities should be exhausted before we accept any theory of them based upon the assumption of their Roman origin. And, since the bars have been found almost exclusively in Italy, it is the Greek cities of Southern Italy that claim first attention in the search for events that might explain the types of this group. So scanty, however, is our knowledge of the history of those Greek cities and so few the remains of them that an effort to connect these bar types with events in their history is bound to be attended by many difficulties. But a strong presumption will have been created in favor of such an origin for them if in case of even two or three bars it can be shown that we have the recognized coin-types or "arms" of some of those cities together with an assignable reason for their employment, or if one can find in the history of those Greek communities events which may reasonably be regarded as commemorated by other of the bar-types. It has, therefore seemed to me that efforts in that direction were well worth while, and some of the results of my researches are here offered.

TRIDENT—CADUCEUS BAR.

The Commercial Greatness of Tarentum.

Plate I.

This bar probably originated at Tarentum, but since it refers to no historical event datable within narrow limits it is impossible to determine where it belongs chronologically in the list of bars to be discussed. It may as well, however, be treated here, where for certain reasons it may also belong.

The few attempts to explain the types of this bar have been so manifestly unsuccessful that special mention of any of them might well be

omitted; but the views of Dr. Haeberlin deserve notice because of the rather forced reasoning by which he endeavors to maintain his general theory of the bars and connect this one with a series of alleged Roman coins. For it is certainly a curious bit of logic that is employed to show that this bar was issued in conjunction with the heavy *Janus—Mercury series* of coins. In the first place, it is not in this instance the types of a silver Didrachm at the head of the series that determines the types of the bar, but the type, rather one of the types, of the large bronze *As*. That may not be important, yet elsewhere he seems to attach no little importance to the fact that the types of the Didrachm furnished the controlling idea for the bar-types. This series of bronze coins Dr. Haeberlin holds was issued at Rome. At the same time silver *Quadrigati* were being struck at the Capua mint; and certainly it is very remarkable in view of the application of the theory in other cases that the types of this bar issued at Capua should be brought into relation with the types of the heavy bronze *As* issued from the mint at Rome and not with the types of the new silver Didrachm brought out at Capua! And even more remarkable is it that while the heavy bronze *As* bears a Janus head and the bar a trident, symbol of Neptune, two of the greater divinities, yet it is the lesser Mercury that furnishes the dominant idea of the coin and bar.

Dr. Haeberlin's interpretation of the caduceus symbol of this bar is interesting. Mercury was the god of commerce, especially on land (?), and that commerce implied established domination of the country in which it was carried on; the caduceus, therefore, becomes a symbol of Rome's supremacy on land. *"Merkurs Walten als Gottes des Verkehrs, wird im erster Linie auf den Verkehr des Landes bezogen und es symbolizirt daher der Caduceus nach italischer Denkweise die Herrschaft über das Land, die im Hinblick auf einen geregelten Verkehr als die befriedete Herrschaft zu Lande aufgefasst wird."* The trident of Neptune on the other side of the bar, taken as a symbol of the lordship of the sea, supplements the idea expressed by the caduceus and rounds out the conception of Rome's lordship on land and sea. *Er* (Trident) *bildet . . . auch der Idee nach . . . zu dem Zeigen Merkurs die ergänzende Parallele. Ausgedrückt sollte werden, dass ein dauernder Zustand geschaffen sei, indem Rom in gesamten ihm fortan unterstehenden Bereiche zu Land und zu See eine Herrschaft siegreich und zu dauerndem Frieden bergründet habe.* Evidently the Romans must have been somewhat obsessed by that notion of their *Herrschaft zur See*, however the notion was conceived,

for Dr. Haeberlin finds it expressed again by the types of the *Cocks-Rostra bar,* a remarkable persistence in an idea that is, as I shall attempt to show in connection with the latter bar, purely mythical, and a very modern myth at that.

This bar with the types of a trident and a caduceus alludes to the commercial greatness of Tarentum; and of Tarentum's proud position in the commerce of the Mediterranean there can be no dispute; while on the other hand there can be no doubt of the appropriateness of the two symbols on this bar to express the sentiments of the Tarentines regarding their prosperous commerce.

There are a number of references among the ancient writers to the commercial greatness of Tarentum. Polybius in the first chapter of his tenth book draws attention to the splendid harbor and commanding position of that city as the chief entrepôt for the commerce between Greece proper, together with that of the Adriatic, and Italy;[1] and of course much of the exports of Italy were carried to Greece and to the eastern shores of the Mediterranean in the same bottoms that had brought wares to the emporium of Tarentum. Even in his own time the favorable position of Tarentum insured her a large commerce although it had been greatly reduced by the development of the port of Brundisium. Florus also has preserved the comment of probably another writer on the subject, yet it is similar in showing that Tarentum was the commercial centre of a vast region extending from the northern Adriatic to Africa.[2] And the commercial position due to these natural advantages was in time strengthened by the course of events in other parts of Southern Italy. For soon after the middle of the fourth century B. C. the pressure of the native inland peoples upon the Greek colonies of Italy resulted in the capture of several cities on the western coast while those on the southern coast suffered the loss of valuable territory and being further menaced lost also their commerce which in some cases was very considerable. The

[1] Polybius, X, 1 : Βρέττιοι γὰρ καὶ Λευκανοὶ καὶ τινα μέρη τῶν Δαυνίων, ἔτι δὲ Καλαβροὶ καὶ πλείους ἕτεροι τοῦτο τὸ κλίμα νέμονται τῆς Ἰταλίας· ὁμοίως δὲ καὶ τῶν Ἑλληνίδων πόλεων Ῥήγιον καὶ Καυλωνία καὶ Λοκροὶ καὶ Κρότων, ἔτι δὲ Μεταπόντιοι καὶ Θούριοι ταύτην ἐπέχουσι τὴν παραλίαν, ὥστε καὶ τοὺς ἀπὸ Σικελίας καὶ τοὺς ἀπὸ τῆς Ἑλλάδος φερομένους ἐπί τινα τόπον τῶν προειρημένων κατ' ἀνάγκην ὁρμεῖν ἐν τοῖς τῶν Ταραντίνων λιμέσι, καὶ τὰς ἀμείψεις καὶ τὰς οἰκονομίας πρὸς πάντας τοὺς κατέχοντας ταύτην τὴν πλευρὰν τῆς Ἰταλίας ἐν ταύτῃ ποιεῖσθαι τῇ πόλει. . . . τέτακται δὲ καὶ πρὸς τοὺς κατὰ τὸν Ἀδρίαν λιμένας εὐφυῶς καὶ νῦν μέν, ἔτι δὲ μᾶλλον ἦν πρὸ τοῦ (l. e. before founding of Brundisium), ἀπὸ γὰρ ἄκρας, Ἰαπυγίας ἕως εἰς Σιποῦντα πᾶς προσφερόμενος ἐκ τῶν ἀντιπέρας καὶ καθορμισθεὶς πρὸς τὴν Ἰταλίαν εἰς Ταραντ' ἐποιεῖτο τὴν ὑπερβολήν, καὶ ταύτῃ συνεχρῆτο τῇ πόλει πρὸς τὰς ἀλλαγὰς καὶ μεταθέσεις οἷον ἐμπορίῳ.

[2] Florus, I, 18: — Cum magnitudine et muris portuque nobilis, tum mirabilis situ; quippe in ipsis Adriatici maris faucibus posita in omnes terras, Istriam, Illyriam, Epirum, Achaiam, Africam, Siciliam vela dimittit.

ruin or weakening of these other Greek centers in Italy seems to have proved beneficial to the commerce of Tarentum, which at that period reached its greatest extent.[1]

While her advantageous position and fine harbor had much to do with the development of Tarentum's commerce, yet, as is well known, an important factor was her large volume of exportable manufactures and products besides the grain, wine and oil, which other Greek communities in Italy and Sicily exported to the motherland and Asia Minor. Woolen fabrics from looms supplied by the flocks of Apulia, her world-renowned purple dyes, certain manufactures in bronze, her potteries, and the products of her fisheries, all combined produced a volume and variety of exports of which very few ancient cities could boast. From this extensive commerce the wealth of the city was derived, a wealth that had made Tarentum a city of great splendor and made possible a too luxurious manner of living.

Now it was no uncommon practice for the Greeks and other peoples of antiquity to celebrate in one way or another the sources of their national wealth, usually with monuments or hymns in honor of the patron divinity. Many instances, too, are found of coin-types which plainly refer to the local products that formed the basis of the state's prosperity, a very notable instance being the sylphium-plant types on the coins of Cyrene. So it need occasion no surprise to find evidence that at least individual citizens of Tarentum saw in their very large and profitable commerce a just ground for pride and something worthy of commemoration. The city itself had done a similar thing when it had placed the horseman-types on the silver Staters in commemoration of its famous cavalry.

The types of this bar well suit the idea suggested above. Taras, the son of Poseidon, had founded Tarentum and the god of the sea was regarded as the patron divinity of the city. This latter fact is officially signalized by a remarkable coin type issued soon after the middle of the fourth century B. C. in which the youthful Taras is represented as appealing to his father, Poseidon, probably on the eve of some crisis in state affairs; while Horace specifically mentions Neptune as the patron

[1] Speck, *Handelsgeschichte des Altertums*, II, 467: — Das Griechentum (in Italy) wurde auf wenige Plätze eingeschränkt, die auch nur mit Mühe die Angriffe der Barbaren abwehrten. Nur Tarent machte eine Ausnahme in dem allgemeinen Verfall. Es erreichte im 4. Jahrh. die höchste Stufe seiner Macht. Sein vortrefflicher Hafen, der ergiebige Thunfischfang, die Wollweberei, die Purpurfärberei, die Vasenfabrikation zeitigten auch seine wirtschaftliche Blüte.

divinity of Tarentum.[1] The trident of Poseidon, therefore, may quite properly be taken as an allusion to that city.

On the other hand, the caduceus of Mercury, patron of merchants, on the other side of the brick almost certainly alludes, as had been before interpreted, to commerce; and in conjunction with the other facts recited above there is surely good ground to believe that it alludes to the flourishing commerce of Tarentum and not to the negligible trade of a subjugated small territory. The commerce of Tarentum was chiefly seaborne, with which fact the types of the trident and the caduceus are particularly consistent.

As to the *lemnisci* or *taeniae* attached to the trident and the caduceus Dr. Haeberlin's confidence that they clinch the argument in favor of the view that the devices allude to a victory is hardly well grounded. By far the most common use of the *vittae* or *lemnisci* was to indicate a consecration; and that is not improbably the meaning of the ribbon and crown on the Romano-Campanian silver *didrachm* to which Dr. Haeberlin refers; for why should Victory be represented as attaching a symbol of victory to such a well-known emblem of victory as the palm-branch! As a sign of consecration the *lemnisci* or *taeniae* are frequently referred to. In this sense Suetonius refers to their use in marking the consecration of Nero's course through the city on his return to Rome from his sham artistic triumps in Greece (Nero, 25); evidently Tacitus alludes to the very same things as we find on the coin referred to when he mentions the reconsecration of the ground on which Vespasian was about to rebuild the temple of Jupiter (Hist. IV, 53: *omne spatium . . . evinctum vittis coronisque*); while there are numerous allusions to the fact that they were worn by priests and priestesses, carried by suppliants, placed on altars and statues of deities, and on the thyrsus carried in the Dionysiac procession (Baumeister, Denkm. Abb. 1849).

If the *taeniae* on this bar are not to be regarded as merely ornamental, it is most likely that they were meant as a sign of consecration, serving to indicate that the artist was employing the caduceus and trident with their appropriate religious and symbolic meaning and not simply as ornaments. Because the bricks possessed none of the qualities of coins, whose types were everywhere regarded as sacred, the use of such an emblem was the more necessary to give the types significance and render the meaning of the combination intelligible.

[1] Horace, *Od.* 1. 28. 29: — *undique mercis*
unde potest tibi defluat aequo
ab Iove Neptunoque sacri custode Tarenti.

In the case of the next bar as well as of two or three others the proposed explanations of the types point to political alliances, real or merely formal. And it so happens that Magna Graecia was the most fertile field of antiquity for military and, perhaps, monetary alliances;[1] and, what is more important here, many of those alliances were commemorated on the coins of the contracting states. The reasons for these alliances are of course well known. For it was not long after the establishment of the Greek settlements on the South coast of Italy till the danger that for a century and a half threatened them from the interior made its appearance. As early as the middle of the sixth century B. C. they were driven into some kind of union for mutual help against the Lucanians and their other inland neighbors; and when wealth and power had been gained by some of the Greek cities, similar alliances were frequently formed by two or more for the protection against a more powerful Greek neighbor. Finally, toward the last of their careers as independent states, a number of alliances, as threatening to their liberties as helpful against the pressing danger, were contracted with foreign princes. It is not difficult, therefore, to realize that that feature of the public policy in each of these cities which had to do with its defensive alliances was a matter of greatest popular concern; for it involved the burning question of their welfare and, at a later period, of their liberties, too, as well as the political fortunes of individuals, and the historic cleavage between Doric Tarentum and Achaean Metapontum, Croton and Sybaris.

So scanty are the annals which the historians have preserved of those cities that it is very unlikely that we have a complete record of the unions they formed; very many of their alliances are known, however, from the combined evidence of historians and the coins. The subjoined list, though almost certainly incomplete, of some of the better attested alliances, because in so many cases corroborated by coins, shows how deeply rooted the practice was in their history and gives us a background of interesting precedents for the explanations of certain of the Greek bars. For while these bars were never issued by the Greeks for use as money and were probably not issued by any State, yet the long standing practice of commemorating various sorts of international relations on the coins evidently exercised an influence upon the private persons who

[1] Gardner, *Greek Coin Types*, page 31.

did produce the bars; and the result was a number of types that reflect important political events of the time. Instances of such coin-types are:

B. C. 550–480. General alliance of all the south Italian Greek cities. Attested by their coins with the obverse type repeated incuse on reverse.

Within same period, and attested by coins of the contracting cities, were the alliances of:

Croton and Sybaris. Croton and DA (ancle?) *i. e.*, Messana.

Croton and Terina. Poseidonia and Sybaris. Pyxus and Siris.

B. C. 390–388. League of the Greek cities renewed under the leadership of Croton. Alliance coin, infant Heracles strangling two serpents.

380–360. The League again renewed, under leadership of Archytas of Tarentum. Federal coinage, Attic obols with types of Athena and Heracles strangling Nemean lion.

388–384. Archadamus of Sparta goes to Tarentum. Commemorated by stars of the Dioscuri as symbols on coins, the Dioscuri referring to Sparta.

380. Alexander the Molossian, of Epirus, goes to assist the Italian Greeks. Macedonian type of Heracles head on gold coins.

281. Confederation of Italian states in alliance with Pyrrhus. Commemorated by elephant symbol on Tarentine Staters.

272. Greek cities come under Roman domination as *civitates foederatae*. Commemorated by Locris on a Stater with Fides crowning Roma.

THE TRIPOD AND BARLEYHEAD BAR.

Alliance Between Croton and Metapontum.

Plate II.

Dr. Haeberlin connects this bar with what he calls the Apollo-series of coins which the Romans are supposed to have issued from the mint at Capua. The series is composed of the silver Didrachm with types of Apollo-head and a horse and a partial series of four bronze coins of which the *As* has an Apollo-head on both sides. The tripod of Apollo on the bar furnishes the reason for connecting it with that series of coins. The types of the bar, however, seem to have no special meaning, real or fanciful, from a Roman point of view. That is specially true of the barley ear, of which no explanation has yet been offered. As to the tripod, thanks to the wide-spread cult of Apollo a coin-type with that symbol of the god can always be explained somehow, wherever it may be found. But, not only from the Roman point of view have the types of this bar no significance, the situation is not improved if the bar be regarded as Campanian in spirit and for use chiefly in Campania. For there seems to be no more warrant for the statement that the Apollo-type was specially favored in Campania than the claim elsewhere that the Pegasus-type is to be identified as the arms, *Wappentier*, of that country.

This bar bears devices that are identical with the long-established and well-known coin types of two cities of Magna Graecia. Since the middle of the sixth century the tripod had formed with rare exceptions the type of the coins of Croton, while the barley-ear had for the same long period appeared on the coins of Metapontum. This union of the recognized coin types, a sort of state arms, of those two cities on this one bar readily suggests the question as to whether the piece may not have been made to commemorate some event of common interest to those two cities. And obviously the question would be of an alliance between Croton and Metapontum. Now, a particular alliance between those two cities is not, I believe, recorded by ancient historians, nor is one with certainty commemorated on their coins. But this lack of such records does not prove conclusively that no alliance was ever contracted between them. For not all the monetary unions and defensive leagues of those states left numismatic monuments, while some that did affect the coinage are not mentioned by the writers. Was there, then, a critical period in the affairs of the Greek states on the southern coast of Italy when their ancient institution of the defensive league became necessary and would concern chiefly these two Achaean cities?

If there was a situation of that sort, it was most likely toward the very end of the fourth century. For soon after the campaign of Alexander the Molossian, B. C. 330-328, the political situation in Magna Graecia became substantially as follows. The Greek cities of the western coast and inland had been captured by the Lucanians and Bruttians, while the cities of the southern coast were being hard pressed by the same enemies. Locris had been detached from the rest of the Greek towns and was somewhat protected by its relations with Syracuse. The difficulties which Alexander had had with the jealous and suspicious Tarentines had induced him to rebuke that city in various ways; thus he had made a treaty of alliance with Metapontum—perhaps, too, with Croton at the same time; he had removed the synod of the League from Tarentine control at Heraclea and had established it in Thurian territory. One of the chief results of these measures was that from the intervention of Alexander the Molossian until the time of Pyrrhus, Tarentum was not an active member of any union with the Achaean cities.

The check which the Italian campaigns of Alexander had administered to the forward movement of the Lucanians and Bruttians was not of long duration, and what respite from aggression it did give the Greek cities was felt chiefly by Tarentum. The assaults, however, soon became

specially strong at two points—against Metapontum and against Croton. This was due directly to the geographical position of the former, in a rich territory on the gulf of Tarentum, and to the power and dominating position of the latter. F. Lenormant draws a similar picture of the position of these two cities in respect to this danger: La Grande Grece, I, p. 130—"*La poussée des Lucaniens contre les villes grecques devenait chaque jour plus forte. Avec Thurioi, c'était Metaponte a qui sa position geographique en faisait recevoir le premier choc,*" and Vol. II, p. 128—"*Mais la principal objectif de leurs (les Bruttiens) attaques fut toujours Crotone, comme Héraclée et Thurioi avaient été des Lucaniens. C'était la grande ville dont la possession aurait doublé leur puissance et leur aurait permis de se créer une marine militaire.*"

In 319 B. C. the position of the Crotons, who were besieged by the Bruttians, became so desperate that an appeal to Syracuse was made. It is in that period, sometime between 330 and 320, when the two chief Achaean cities fronted alone the attacks of the Lucanians and Bruttians, that the alliance to which the bar evidently alludes may have been made. Nor is this conjecture entirely unsupported by evidence. For on silver Staters issued at Croton in the period from 330 to 300 B. C. a barley-ear is found as a symbol on the reverse, which M. de Foville[1] interprets as probably an allusion to an alliance between Croton and Metapontum. And far more suggestive of an alliance between these cities, if not convincing proofs of one, are the types of certain coins struck by Metapontum in about the same period. One of these is a small silver piece[2] with reverse type consisting of a barley head and a tripod, the latter device being of the same size as the former and not a minor type or symbol in the field. Another is a small bronze coin with the barleyhead on the obverse and the tripod on the reverse[3]. This latter piece has in fact been explained by Minervini as the product of such an alliance as is here in question.

However strong the objections may be to the view that these coin types contain allusions to an actual alliance between Croton and Metapontum, it will hardly be disputed that they are noteworthy evidence of close political relations between the two cities.

And just such cordial relations established between Croton and Metapontum under stress of a common danger, and not necessarily a

[1] *Revue Numis.* 1908, p. 8 See, however, *Numismatic Chronicle* 1916, p. 214, where Mr. S. W. Gross gives his reasons for doubting that interpretation.

[2] Garrucci, *Mon. d. Italia ant.*, Tav. CIV, No. 21.

[3] Ibid., Tav. CV, No. 30.

political alliance, would be an event of a sort and sufficient to explain the association of their respective *arms,* the tripod and barleyhead, on this bar. The absence of inscriptions of any sort is not a serious omission. On no other of these bars was an inscription less requisite to explain its origin and meaning than on this one; for the devices were well known in Southern Italy in relation to Croton and Metapontum, and equally well known was the significance of their appearance together on a coin or on such a piece as this bar.

The question of the place where the bar may have had its origin, whether at Croton or Metapontum, can hardly be answered, nor is it of much importance; while the inevitable questions relating to its issue, whether by public authority or private enterprise, and also to its use, will be discussed below.

HOG-ELEPHANT BAR.

The Alliance Between the Italian States and Pyrrhus for the War with Rome.

Plate III.

It is very generally accepted that the types of this brick refer in some way to the war between the Romans and the Italian States aided by Pyrrhus. This conviction is due chiefly, it seems, to the representation of an elephant on the piece; for the elephants brought to Italy by Pyrrhus were, so far as we know, the first with which the Romans had to deal in battle, and it is stated specifically that those captured at Beneventum and later brought to Rome were the first elephants ever seen by the Roman populace. Such capital events certainly justify the conclusion that somehow the elephant type alludes to the military force brought to Italy by the king of Epirus and possibly to some particular engagement with that force. But however obvious the general events to which the types of the brick may allude seem to be, yet the particular way in which the elephant and hog are to be interpreted as having reference to the war with Pyrrhus has not been shown to be so obvious.

Without any objection, so far as I know, the types have been explained as alluding to a catastrophe at the battle of Asculum. According to a legend[1] the Romans took advantage of their thorough knowledge of certain idiosyncrasies of the elephant—an animal, as stated before, with which hitherto they had had nothing to do, at least in battle—and resorted to the strategem of introducing hogs into their battle-front and

[1] Aelian *De Nat. Animal.* I, 38; quoted by Garrucci.

the grunting of these hogs caused the elephants to stampede and trample down their own lines. The result of this debacle was a brilliant victory for the Romans: ἡ νίκη σὺν τοῖς Ρωμαίοις λαμπρῶς ἐγένετο. Milani[1] accepts this interpretation, but with the interesting addition that the Romans meant to imply a hint to the Tarentines of the contempt in which they held the dangerous military elephant.

Now, I do not understand that Garrucci, Haeberlin, nor anybody else who has accepted this explanation of the types necessarily regards the tradition of the elephant-stampede at Asculum as authentic. Mr. Hill in particular speaks guardedly of it, suggesting that the story may have been of later invention "inspired by the types of the 'brick' "; but Dr. Haeberlin is certainly less cautious, evidently believing that the tradition arose immediately after the battle and confidently states that the types allude to the stampede and that the brick was issued in 273 B. C., the date when the four elephants captured at Beneventum in 275 were led in triumph at Rome.[2] Accepting the existence of the story at so early a date as B. C. 273, or but seven years after the battle, does not, however, imply a belief that there was any basis in fact for the tale. Similarly there can be no question about a story of *"The Angels of Mons"* just after the battle at that place (1914), but there is likewise no question that the story was fictitious. More than one ancient coin-type represents an artistically wrought out but baseless legend; such legends, however, generally belonged to the already remote and somewhat shadowy past of the issuing State and there was, at the time the coin-types were engraved, an uncritical and quasi-religious faith in the stories.

But the case in question is very different and one in which the facts back of the story cannot be neglected, particularly by those who maintain that the bar was issued by the Roman government. For in that case it is implied that the piece was meant incidentally to commemorate an action that was immediately or eventually favorable to the Romans: and several writers plainly hold that the bar was intended to celebrate the final triumph of the Romans over Pyrrhus. In that view the Roman government must be supposed to have claimed a victory in the battle of Asculum, or at least to have succeeded by means of a clever stratagem in stampeding the elephants in the army of Pyrrhus, and the achievement was regarded as worthy not only of record but of symbolizing their com-

[1] *Rivista Ital.* 1891, p. 81 — . . . i Romani fecero intendere sarcasticamente a chi non l'avrebbero voluto sapere ai Tarentini che a cacciare lo spauracchio dei magni elefanti asiatici di Pirro, bastava il grugnito della leggendaria scrofa di Roma.

[2] Haeberlin, *Systematik*, p. 54.

plete triumph over the powerful ally of the Italian confederation; for otherwise we must conclude that the Roman government sanctioned, for no discernible reason, an apocryphal story, and that, too, almost immediately following the supposed event. But the fact is that there is no trustworthy evidence either of a victory at Asculum or of a debacle in the lines of the allies. For from the dependable accounts of that battle, both ancient and modern, with special reference to Prof. Mommsen's among the latter, two or three facts stand out prominently. These are, that from the Roman point of view it was at best something less than a rout, at worst something more than a technical victory for Pyrrhus; for the Romans fled from the field to their strongly fortified camp where they evidently expected and prepared for an attack, while Pyrrhus remained in full possession of the battle ground. And as to the story of the elephant-stampede, alleged to have been occasioned by a clever strategem, it is impossible to believe that, had it occurred or been mentioned by an early writer of any trustworthiness whatever, the later annalists and historians would have failed to make much of it. That they do not seem to have done; and Professor Mommsen evidently found no ground for crediting the tale and does not mention it in his account of the battle. In fact he takes an altogether different view of the part performed by the elephants in that battle; for he says: "It was not till the numerous escort of the elephants had, with arrows and stones hurled from slings, dislodged the combatants stationed in the Roman war-chariots and had cut the traces of the horses, and the elephants pressed upon the Roman line, that it began to waver. The giving way of the guard attached to the Roman chariots formed the signal for universal flight, which however, did not involve the sacrifice of many lives, as the adjoining camp received the fugitives."

On the other hand, assuming that, although no such disaster took place within the lines of the coalition, yet a story that it did occur was spread about by the Romans to conceal the facts of their defeat and that the story was credited, it is still impossible to believe that the Roman government would have made use of such an unauthentic tale for the subject of types of such a commemorative piece, especially at a time when the facts about the battle of Asculum were very fresh in the minds of all informed citizens.[1] For these reasons it is quite impossible to accept the usual interpretation of the types of this brick and retain

[1] It is not unlikely that the dramatic description of an elephant-stampede in battle was one of the stock themes of the schools; and Aelian employed the theme for practice in writing Greek.

one's well-founded respect for the good taste and sane judgment of the Romans in the matters respecting a proper pride in their national history.

The interpretation of the types which I venture to suggest, would, if found acceptable, remove the brick from any direct connection with Rome, and, of course, from all connection with the Roman or any other monetary system. Beginning with what I regard as properly the reverse type of the brick, the accepted belief that the elephant alludes to the advent of the Epirote king and his army in Italy as an ally of the confederation of Italian States against Rome is so well grounded that probably none would dispute it. That momentous event was commemorated on at least three issues of Tarentine Staters by means of an elephant-symbol in the field, showing that the elephant was regarded as the proper symbol of the Epirote army. But it is the sow that furnishes the proof for connecting the types of this brick with the alliance between Pyrrhus and the Italian coalition.



Fig. 1.

A rational and dignified explanation of the hog-type is found in the old Italian ceremony of sacrificing a young sow when making a treaty of alliance (foedus). In the artistic representation of that ceremony on certain issues of coins, of which the denarii with the oath-scene issued during the Social War are specially instructive examples, a pig is held by a young man, while representatives of the high contracting parties stand with swords pointing toward the animal, probably meant to be resting upon the head of the victim, and thus take the solemn oath. It is probably such a representation, very likely on a coin, that Cicero had in mind and perhaps before his eyes when he wrote the passage in *De Inventione II, 91: In eo foedere quod factum est quondam cum Samnitibus, quidam adulescens nobilis porcum sustinuit iussu imperatoris;*[1] for the institution had apparently become obsolete after the complete conquest of the Italic states by Rome. (*Fig. 1.*)

[1] See also Livy I, 24 and Varro *De R. R.* II, 4.

The pig which was sacrificed in the religious ceremony that was observed to make a *foedus* binding upon all parties was thus the central object of the final act with which the treaty of alliance was consummated and made effective. The appropriateness, therefore, of the pig as a symbol of the resulting alliance or of the allied powers is hardly open to dispute.

When the coalition was formed for the great struggle with Rome the power of the Italic states predominated and so there is little room to doubt that when the treaty of alliance was made that treaty was solemnized by the Italic and not by the Greek rite. The pig on this brick is, therefore, to be understood as a symbol of the alliance among the Italian states; and in conjunction with the elephant for a reverse type the wider alliance between the coalition on the one hand and king Pyrrhus on the other is appropriately symbolized.

An objection to this interpretation will perhaps be made on the ground that the animal represented on the bar is a sow, while nearly all writers employ the masculine form (*porcus*) of the word in discussing the old Italian ceremony of making treaties of alliance; and especially since Servius states definitely that Vergil had made a mistake in calling the pig employed as a victim for this ceremony a sow[1]—*Comment., ad Aen. l. c., falso autem ait "porca"; nam ad hoc genus sacrificii porcus adhibatur.* But Vergil's antiquarian knowledge is generally trustworthy, and in this case he is corroborated by the representations on coins. For on the *denarii* struck by the confederates during the Social War where the sex of the pig is determinable it is found to be a sow; and Garrucci so describes it: *una porchetta, Mon. della Italia,* p. 105, and Tav. XCI, 1-3. The masculine form *porcus,* on which alone Servius may have based his criticism, is of common gender, and so used for "pig" without any notion of the sex.[2] Furthermore it was a young pig that was used for the ceremony as is certainly shown both from the representation on the Denarius and by Vergil's other allusion to the sacrifice in *Aen.* XII, 170:

> *Sacerdos*
> *Sactegerae foetum suis intonsamque bidentem*
> *Attulit.*

And it is a young sow that is represented on this bar, the proportions,

[1] *Aen.* VIII. 638. . . . *et caesa iungebant foedera porca.*

[2] Varro, *de R. R.* II, 4, 13, *scrofa alat suos porcus,* and in the singular with a qualifying word: Cic. de Leg. II, 22, 57, *porco femina piaculum.*

however, suited to the artistic requirements of a figure that should fill the large field of the brick.

If the above interpretation of the types of this brick be correct, then there can be little doubt that the piece had its origin in one of the Greek cities of southern Italy, in one of the members of the alliance during the war with Rome when Pyrrhus was their ally. It is impossible to state just where it originated, for a brick with such types might have appeared in any of the cities that participated in the treaty of confederation for the prosecution of the war. But the most probable place of origin is Tarentum. Tarentum was the chief State of the Italian allies, it was the Tarentines that had taken the lead in securing the aid of Pyrrhus, and it was at that city that the king landed his army and established his headquarters.

The reasons for commemorating the alliance between the Italian coalition and Pyrrhus are not so very far to seek. The motive is to be found in the great enthusiasm which the arrival of such a powerful army and resourceful general aroused throughout the countries that hoped at last to check the rising power of Rome and retain or recover their liberties. There was little doubt that the destruction of the Roman domination in the conquered states of the South would speedily follow. In these circumstances it was natural that poet, painter, and sculptor should be aroused to celebrate in their respective ways this promising turn of affairs. And in this brick we have probably but one of many examples of commonplace objects which in one way or another reflected the enthusiasm of the hour.

THE EAGLE-PEGASUS BAR.

Offensive and Defensive League Between Rome and Carthage.

Plate IV.

The types of this brick have proved exceedingly difficult to explain; and the problem they present has not been made easier, as might be expected, by the fact that the eagle and fulmen type was apparently a distinctive Roman emblem, as it certainly was in later times, and also by the presence of the legend ROMANOM which seemed to some writers to determine the origin of the piece very definitely and fix it beyond doubt as an issue of the Roman government. For the ground given by those plain indications at once became insecure when the investigator turned to the other side of the bar and attempted to explain the pegasus-type; for the latter no rational explanation has yet been found.

Now the eagle and fulmen type does indeed seem to have reference to Roman sovereignty and so it has been generally accepted, though somewhat cautiously because, as Mr. Hill suggests,[1] that meaning may be of later origin. As to the pegasus-type, several theories have been advanced to explain it and justify its presence on a supposed Roman bar in conjunction with the eagle. Thus Professor Milani suggested that it was a sort of type parlant alluding to the invincible Roman cavalry: . . . . *imagine parlante della insuperabile rapidità e potenza della cavalleria romana, la quale l'ha infatti adottato più tardi per proprio vessillo.*[2] Such a flight of fancy is certainly very interesting and worthy of the subject! Yet not much less fanciful is the view of Dr. Haeberlin that the pegasus is to be understood as the arms of Campania—"*das Wappentier Campanieus.*"[3] He offers no reasons for connecting pegasus with Campania in such a manner; whereas, if among the monuments of Campania one were to search for what might be considered to have been an armorial emblem of that country he would very likely decide upon the well-known man-headed bull which occurs so often on coins of Campanian cities; and he certainly would be cautious about pronouncing in favor of such an object as pegasus, the myth of which was so very widely spread and which appears upon the coins and other monuments of so many Greek settlements. It is, indeed, difficult to find any evidence that might warrant Dr. Haeberlin's interpretation of this interesting type.

With that view, however, of the pegasus-type on this bar Dr. Haeberlin proceeds to a most ingenious explanation of the bar as a whole. The types of the piece, he holds, allude to the final conquest of Campania by Rome, an event definitely consummated and best marked by the completion of the military Via Appia in B. C. 312. Commemorative of the completion of that highway the *Wheel-series* of heavy bronze coins was issued by Rome from the Capuan mint and in connection therewith this bar with the eagle-pegasus types. This bar is, therefore, the first of the nine forming his "Romano-Campanian" group. Since this interpretation of the bar depends wholly upon the unproved assumption that pegasus was the *Wappentier* of Campania one could not feel very secure about its correctness; and since there is good reason to believe that the assumption is utterly wrong, for that reason, if for no others, the Haeberlin explanation would have to be rejected.

[1] Hill, G. F., *Hist. Roman Coins*, p. 14, ftn. 1.
[2] *Rivista Ital.*, 1891, p. 70. [3] *Systematik*, p. 32.

As to the inscription ROMANOM Dr. Haeberlin accepts, and his general theory of the bars naturally reinforces, the view that it is the official ethnic name; and he explains the presence of the inscription on the side that bears the alleged arms of Campania by saying that thus it was meant to express graphically that Campania had become entirely Roman territory.

The significance and great importance that have generally been attached to this inscription have been discussed above and certain objections to the theory stated. A reason for its occurrence on the reverse of the bar will be suggested below.

The explanation of the types of this brick about to be suggested is so utterly at variance with the views of the many able writers who have discussed it, writers whose great learning and acumen will always be entitled to the highest esteem, that I hesitate to advance it, and I should feel even greater diffidence were it not that the views which have been given are not supported by substantial proofs and also that other scholars of equal authority have been unable to accept them. For the explanation here proposed does not find the meaning of the types in the conquest of Campania nor in any other Roman conquest, nor in the Roman government the authority that issued the bar.

The eagle-and-fulmen type of the obverse of this bar with much probability refers to Rome in some way; and apparently it is an emblem of Roman power and sovereignty, a sovereignty that had been extended and was, at the time this bar was made, upheld wholly by the Roman armies. It cannot, perhaps, be definitely proved that this was a recognized symbol of Roman power in the early part of the third century B. C., the period in which I propose to date the bar, but the eagle-and-fulmen occurs as a coin-type on bronze coins issued by certain Italian cities under Roman domination before the end of the third century, so that it seems very probable, indeed, that it had become established as a symbol of Rome at a much earlier date, and very likely as early as the beginning of that century, perhaps earlier.

In the article on *Pegasus* in Roscher's Lexicon, p. 1743, occurs the very important statement that a horse, either with or without wings, was an emblem on Punic ships; *ein einfaches oder geflügeltes Ross ist ja das Zeichen punischer Schiffe, doch gehört es als solches wahrscheinlich unter den symbolischen Figuren der Phöniker.* The horse emblem in some form—hippocamp, wingless horse or pegasus—on Phoenician and Punic ships must have been familiar to seafaring peoples throughout the

Mediterranean. Strabo states, for instance, that small trading ships from the Phoenician city of Gadira were called *horses* (ἵπποι) because they bore effigies of horses on their prows.[1]

The pegasus-type was placed on the reverse of the brick by an Italian Greek as an emblem of the Carthaginian sea power. The horse on Punic ships and on the ships of other Phoenician colonies may not have been a winged pegasus, but a Greek was quite certain to recognize in even the well-known wingless horse of Carthage the same mythical animal, the offspring of Poseidon, that he knew as the winged pegasus; and they may have been the same, for originally the Greek pegasus was a wingless creature. And in the course of the third century, probably, however, as Mr. Head states, in the period between the First and Second Punic Wars, a winged horse (pegasus?) was employed by the Carthaginians for the type of a large silver Duodekadrachm, while in the same period a Dekadrachm was struck with the type of the wingless horse. Evidently, therefore, the myth of a winged pegasus was being gradually localized at Carthage in the third century.

This evidence is of unmistakable importance in connection with the types of this brick. For if an historical reason can be found for uniting on such a thing as a coin or a bar like the one under consideration such devices as the eagle and fulmen, symbolical of Roman power, which was mainly a military power, and the pegasus, symbolical of the Carthaginian sea-power, a rational and perhaps a correct explanation of the types will have been gained. And such a reason clearly exists. For Livy states that in B. C. 279 Rome for the fourth time renewed a treaty of alliance with the Carthaginians.[2] The texts of these four treaties are given by Polybius, the fourth[3] of which has special reference to the struggle with a number of Italic nations and western Greeks, then led by Pyrrhus, in which Rome and Carthage had a common interest, and felt the menace of a common danger should Pyrrhus succeed in building up a powerful Greek empire in the West. Mommsen in his History of Rome (Vol. II, page 28) discusses this treaty in extenso:

> "The immediate effect, indeed, of this union of the Italian and Sicilian Greeks under one control was a closer concert also

[1] Strabo, II, 3, 4: —Τούτων (Γαδειριτῶν) γὰρ τοὺς μὲν ἐμπόρους μεγάλα στέλλειν πλοῖα, τοὺς δὲ πένητας μικρά, ἃ καλεῖν ἵππους ἀπὸ τῶν ἐν ταῖς πρῷραις ἐπισήμων.

[2] Livy, *Epit. Lib.* XIII. Cum Carthaginiensibus quarto foedus renovatum est.

[3] Polybius, III, 25: — ἐὰν συμμαχίαν ποιῶνται πρὸς Πύρρον, ἔγγραπτον ποιείσθωσαν ἀμφότεροι, ἵνα ἐξῇ βοηθεῖν ἀλλήλοις ἐν τῇ τῶν πολεμουμένων χώρᾳ· ὁπότεροι δ' ἂν χρείαν ἔχωσι τῆς βοηθείας, τὰ πλοῖα παρεχέτωσαν Καρχηδόνοι καὶ εἰς τὴν ὁδὸν καὶ εἰς τὴν ἔφοδον, τὰ δὲ ὀψώνια τοῖς αὑτῶν ἑκάτεροι. Καρχηδόνοι δὲ καὶ κατὰ θάλατταν Ρωμαίοις βοηθείτωσαν, ἂν χρεία ᾖ. τὰ δὲ πληρώματα μηδεὶς ἀναγκαζέτω ἐκβαίνειν ἀκουσίως.

on the part of their antagonists. *Carthage and Rome now converted their old commercial treaties into an offensive and defensive league against Pyrrhus,* the tenor of which was that, if Pyrrhus invaded Roman or Carthaginian territory, the party which was not attacked should furnish that which was assailed with a contingent on its own territory and should defray the expense of the auxiliary troops; *that in such event Carthage should be bound to furnish transports and to assist the Romans also with a war fleet,* but the crews of that fleet should not be obliged to fight for the Romans by land; that lastly, both states should pledge themselves not to conclude a separate peace with Pyrrhus. The object of the Romans in entering into the treaty was to render possible an attack on Tarentum and to cut off Pyrrhus from his own country, neither of which ends could be attained without the coöperation of the Punic fleet; the object of the Carthaginians was to detain the king in Italy, so that they might be able without molestation to carry into effect their designs on Syracuse." (The Italics are mine.)

This treaty went into effect immediately after it was concluded, and concerted action between the Carthaginian fleet and the Romans proceeded at once; for Prof. Mommsen adds: "A powerful Carthaginian fleet of 120 sail under the admiral Mago proceeded from Ostia, whither Mago seems to have gone to conclude the treaty, to the Sicilian Straits."

Here, then, is an event of capital importance involving Rome and Carthage, and involving them in such a manner that it might be very appropriately commemorated by means of just such a monument as this bar with a Roman eagle on one side and the Carthaginian horse or pegasus on the other. The suitability of the types to the event is quite beyond question, a fact however that does not definitely settle the question of the explanation of the bar; it does justify the suggestion that such might be the correct explanation and also the hope that further investigation may produce better evidence that the types of the bar do allude to that treaty. This suggestion is further supported by the inscription on the brick!

For if the meaning that has been suggested for the types should prove correct, the interpretation of the inscription ROMANOM on the reverse is not far to seek. If a hint of how it should be read were necessary, that hint would be given by the inscription on a Roman Aureus

struck by the monneyer C. Antestius Reginus in B. C. 18, (Bab. Antestia, No. 17). The reverse type of that Aureus alludes to the treaty with the Gabini and the inscription reads,

FOEDVS P (*opuli*). R(*omani*) QVM GABINIS

and if the inscription on the bar be expanded, with the help of the meaning expressed by the types, according to the form given on the later coin, it would read,

FOEDVS ROMANOM *CVM CARTHAGINIENSIBVS.*

It is doubtless unnecessary to repeat that the word ROMANOM is a genitive plural form. Whether it is an alternate form of ROMANO found on certain silver coins, that is, whether the two forms were in use in the same place and at the same time, is open to question.

Assuming that the above explanation of the bar is correct the question naturally arises as to the time and place of its origin. Of course the Haeberlin theory that it was made in B. C. 312, or very soon thereafter, would be proved erroneous—in fact the whole ingenious *Systematik* collapses if one or two of those bricks should be torn from the structure. The bar was probably made very soon after the political events of B. C. 279, which inspired the choice of the types, and very likely, though not necessarily, before the relations between the Romans and Carthaginians became strained, preceding the outbreak of The First Punic War. This *terminus ante quem* might be considered settled if the brick had been issued by the State; but it is not so certain, though probable, if the piece was of private origin.

And certainly the question whether the bar was, as Haeberlin holds, after all issued by the Roman government as a sort of commemorative piece must be answered in the negative. For although there is much evidence that the practice of commemorating events of public and private importance had become established among the Romans long before the date suggested for this brick, yet it is improbable that the Romans would thus honor an alliance that was dictated by necessity with a nation that was even then an object of their contemptuous hatred. For this reason and other considerations which I shall state further on it seems probable that the piece was the product of private enterprise.

The place of production cannot be determined with any greater degree of certainty than the character of the authority that was responsible for the piece, but I venture to suggest that it was at Venusia where a large Roman colony had been established (B. C. 292) and which was

within the immediate vicinity of the stirring events of the war with Pyrrhus and the coalition. The Roman colonists and Greek exiles at Venusia were in a position to be acquainted with the drift of affairs at Tarentum, especially to know of the great hopes of victory the coming of the Epirote had inspired. It is also by no means impossible that the hog-and-elephant bar, which the consummation of the alliance and the arrival of Pyrrhus had brought forth, had become known at Venusia and in response to the boast thus implied this bar was produced alluding to the more than counterbalancing alliance between Rome and Carthage.

THE TRIPOD AND ANCHOR BAR.

Croton's Participation in the First Punic War.

Plate V.

This bar is discussed to considerable length by Milani in his paper on the *aes rude* and *aes signatum* of the important find at Bruna. He endeavored to show that the various specimens of this type were produced at different periods, basing his argument upon differences of weight and a variation of artistic treatment, which he regarded as marking successive degrees of development from an archaic style. In the anchor he finds allusions to sea voyages, whose destinations, as indicated by the tripod of Apollo, were shrines of that god. He then connects the different specimens of the bar, or rather coins according to Prof. Milani's view, with various official embassies to Delphi on occasions of pestilence at Rome in B. C. 453, 429, and 399.

There are a good many obstacles to one's taking this explanation very seriously, let alone accepting it. Chief among them is the impossibility of accepting the view that the artistic treatment of the types, especially of the tripod, on which Milani lays most stress, reveals traces of archaism in any of the specimens or any diversity of treatment that can be ascribed to different stages of artistic development. Not all of the specimens are from the same moulds, some of them are evidently better done than others, but the differences are those of careful and careless workmanship. The several pieces are certainly contemporaneous. As to the explanation of the anchor-type, Dr. Haeberlin has pointed out that it was too widely employed, by inland as well as by maritime states, to admit of the specific interpretation Prof. Milani offers.

The tripod of this bar again recalls the well-known coin-type or *arms* of Croton, and since no satisfactory explanation has yet been given

of the types from a Roman point of view the effort to find an explanation of them in the history of Croton is specially justified. And in the part which Croton almost certainly played in connection with the First Punic War I believe there can be found a rational explanation of the tripod in connection with the anchor on this bar. To make clear the motive that inspired the employment of such types as well as the event it seems to commemorate it is necessary to recall briefly certain facts about the extension of Roman sovereignty over the Greek cities of Italy and the manner in which that authority was accepted by the Greeks.

Rome's conquest of the South Italian states, made complete by the fall of Tarentum and of Cosentia, capital of the Bruttii, in the same year of B. C. 272, was followed by the exercise of those mild measures Rome had before employed in dealing with peoples rightfully proud of a rather long and glorious past. For following a policy which had also served so well her own interests, the Greek cities were annexed with the peculiar relationship of confederated or allied states (*civitates foederatae*), a form of incorporation that left in their own hands the administration of their local affairs. In return for this favorable status there was required of them military aid when needed—of the inland cities, troops and military supplies; of the maritime states, contingents of warships for the Roman fleet.

Now there can be no doubt that the real benefits which accrued to the conquered Greek cities were fully as great as the advantages gained by the conqueror, important though the latter were. For the advent of Roman power checked at onee the recurrent bitter wars among the Greek communities themselves, it freed them, also, from the centuries-old menace of their rude war-like neighbors, and finally it delivered them from the increasing peril of being subjugated by a foreign power, a danger to which their later policy of appealing to foreign princes for help and protection had exposed them. On the other hand, the terms of submission granted by Rome were so respectful of the political feelings of the Greek communities that they not only became reasonably contented, but were apparently inspired with considerable enthusiasm for their new suzerain.

Our information in regard to the real sentiment of the Greek population in Italy toward Rome is not extensive, but the little we have indicates that with the realization that they had been saved from a worse fate than the loss of independence there arose among them a genuine

loyalty to the new relationship. The most substantial proof of this feeling is the response the various maritime cities made to Rome's requirements of warships for the prosecution of the First Punic War, for that was prompt and seemingly enthusiastic, while the heavy burdens laid upon them during that long struggle were evidently borne without undue complaint. Had they desired to be rid of Roman domination, the war offered them the opportunity of achieving that end. For had the Greek cities revolted or even been lax in the naval service, which must have fallen largely to their lot, the Romans would have been paralyzed in not only their naval but also their military operations, so dependent were they upon the ships furnished by the Greek cities for transports as well as ships of the line, particularly in the earliest part of the struggle.

But in no way is the spontaneous loyalty of the Greek cities toward Rome better attested than by the Didrachm which Locris struck soon after Roman domination had been securely established in that city, a form of proof that is particularly interesting in view of the suggestion presently to be made in connection with the bar in question. I mean that well-known silver Didrachm[1] with the reverse type showing *Fides* standing and in the act of placing a crown upon the head of *Roma* who is seated. To leave no doubt about the identity of the two figures and the significance of the type the engraver added the names ΡΩΜΑ and ΠΙΣΤΙΣ. In this remarkable way Locris gave expression to her loyal acceptance of Roman domination. But not less important than the testimony of this interesting monument to their political sentiments was the resort to the traditional method of expressing them by means of a coin type; for it is a strong proof that this means of commemorating political events, especially those of an international or quasi-international character, had become thoroughly established in the course of the long practice that has been mentioned above. It will, therefore, hardly appear a far-fetched suggestion that in some of the other Greek cities a similar means was employed to give expression to a similar sentiment though perhaps by individuals after the right to strike coins had been lost or at least limited by law or necessity.

What part, now, did Croton probably take in the First Punic War that could justify the theory that this brick has reference thereto? Ancient historians tell us comparatively little of the extent of the services Rome had from her recently conquered Greek cities in that war, though sporadic notices prove that they were considerable. Especially can there

[1] Head, *Historia Numorum*, p. 88, fig. 59.

be little doubt that both Mommsen[1] and Pais[2] are correct in assigning to them a very important role in all the naval preparations and operations. Suddenly brought face to face with the greatest sea-power of the time Rome found herself unequipped to meet such an antagonist; therefore she had to depend upon the contingents of warships required of the maritime cities for whatever effective naval force she succeeded in mustering at the beginning of the war. But, more important still, these cities furnished men trained to the sea, also men skilled in the construction of ships, and finally, what was of chief value, in the great forests which Rome had exacted from the Bruttii as a condition of peace in B. C. 272 there was near these Greek cities a convenient supply of excellent timber. This forest, known as the Sila, stretched through what had once been the territory of Croton and other cities, but had been taken from them by the Bruttii. The Sila was famous in antiquity for the abundance of its timbers which were suitable for every kind of construction including shipbuilding.[3] From it were built the considerable fleets which the coast cities had from time to time for the past two centuries sent to sea; and when the Elder Dionysius sent a force of men to Italy to cut ship-timber it was undoubtedly from the Sila the timber was procured (Diodorus Sic. XIV, 7).

Now, when the Romans took possession of half of that splendid forest it became a public property and was exploited by the State through commissioners who leased the rights to use the grazing lands, to produce pitch, and cut timber. This was probably the abundant source of timber the Romans had when in the first conflict with Carthage they were compelled to make the greatest exertions to create and afterwards to maintain a fleet. For if we accept the statements of the careful Polybius the Roman fleet of triremes, composed mainly of the contingents levied upon the Greek maritime cities, was soon found to be no match for the heavy Carthaginian battleships, so that heavier vessels, on the model of a captured quinquereme according to Polybius,[4] had to be built at once after the breaking out of hostilities, while successive disastrous naval engagements made it necessary to build several large fleets in the

[1] Mommsen, *Staatsrecht*, III, p. 677: — Die Italiken, so weit sie Griechen sind, bilden den Kern der römischen Flotten.

[2] Pais, *Storia di R*, I, 2, p. 645: — Quelli che posero fine alla supremazia punica, più che ai duei romani sono dovuti al genio degli Italici e dei federati delle altre regioni maritime della penisola.

[3] Dion., Halic XX, *Frag. V*: — *οἱ βρέττιοι, ἑκόντες ὑποταγέντες Ρωμαίοις, τὴν ἡμίσειαν τῆς ὀρεινῆς παρέδωκαν αὐτοῖς, ἣ καλεῖται μὲν Σίλα, μεστὴ δ' ἐστὶν ὕλης εἰς οἰκοδομάς τε καὶ ναυπηγίας καὶ πᾶσαν ἄλλην κατασκευὴν εὐθέτου.*

[4] Polybius, I, 20.

course of the long war. These ships were probably built in several places, and very likely some of them in the *navalia* at Rome, but it is most probable that the majority of them were constructed on the southern coast where excellent timber was at hand in abundance and skilled shipwrights could be secured.

While direct evidence for such a conclusion is not given by the ancient writers, yet circumstantial evidence, if evidence be needed, is to be found in the movements of the Roman fleet as recorded by the historians. For example, in speaking of the new fleet of 220 sail which the Romans built in B. C. 254, following the disaster off Camarina, Polybius (I, 38) says: "*As they passed through the straits* they took up from Messana those of the vessels which had been saved from the wreck; and having thus arrived with three hundred ships off Panormus . . . they began to besiege it." This fleet, then, came from the south, or at least a portion of it apparently did, passed through the straits on its way to the north coast of Sicily and on to Panormus. Certainly that must be the meaning of the language of Polybius. For had the fleet been built at Rome, for instance, and sailed down to Sicily it is improbable that such a careful historian and so clear in stating facts, would have mentioned a single passage through the straits as an incident of the voyage to Panormus; for a fleet coming down from Rome would have passed through the straits twice (at least through the greater and more dangerous portion of them) in reaching Messana and then proceeding to Panormus. But it is probably a safe assumption and hardly requiring proof that when all the resources of the republic were laid under contribution to meet the greatest sea-power of the time on something like equal terms the Romans made the fullest possible use of the vast shipbuilding facilities available on the southern coast.

When the exploitation of the State's portion of the Sila was put in charge of a commission, the commissioners were stationed at Croton, a fact that would lead one to suppose that the portion belonging to Rome stood convenient to that city. And, indeed, the best part of the Sila apparently was just back of Croton, where it had long afforded protection as well as material advantages to the enemies of the city during the protracted period of border warfare. So when in the First Punic War the Romans proceeded to utilize that forest for the construction of warships it was almost certainly at Croton that the extensive yards were built. This inference rests not alone upon the fact of Croton's proximity to the Sila but upon the equally important consideration that its harbor was

one of the best on that coast between Messana and Tarentum.[1] It was not a land-locked harbor, only a roadstead suitable for use in the summer, but evidently a better anchorage than Polybius seems to describe if, as he further states, the great wealth of Croton was largely due to the superior advantages shipping had there over any afforded by the other cities of that coast. Furthermore, Croton had the most easily defended citadel[2] on the entire south Italian coast. Croton was, then, at once the most convenient and the most secure place along that coast for the utilization of the public forests for shipbuilding; and there is probably very little if any ground to doubt that the principal shipyards were at that time located at that place.

It is to that event, the particular part which Croton played in the prosecution of the First Punic War, that the types of the brick have reference. The presence of the tripod as the obverse type furnishes of course the principal clew to this attribution, but the lead thus given has brought us to an event that also gives a reasonable ground for associating the anchor with the Croton tripod.

It is not claimed of course that the anchor had in antiquity the specific symbolic meaning that is apparently here attached to it. In fact it is difficult to determine the symbolic meaning of the anchor found on Greek and Roman coins; its significance seemingly varies and is applied in several ways to shipping and harbors, but hardly to voyages, which the Dioscuri were supposed to safeguard. On this brick the anchor is employed to indicate in a general way the sort of service, that is, to the fleet, which Croton rendered to the Romans during the war.

If much be still desired to place the attribution of this bar beyond dispute, yet I believe that some solid ground has been reached as a basis of future investigations. The tripod had for centuries been the principal coin-type of Croton; few Greek cities had more consistently adhered to a particular device than it had to that emblem, so that in Italy and likely much more widely, the tripod-device must have become so well associated with that city as to acquire as much the position of a *city-arms* of Croton as the owl was of Athens, Arethusa and the dolphins were of Syracuse, or Pegasus of Corinth. And it is because of this historical association of the tripod with Croton, coupled with the fact that there was an important event in the history of the city to which the

[1] Polybius, X, 1, 6: *ἐκεῖνοι γὰρ θερινοὺς ἔχοντες ὅρμους καὶ βραχεῖάν τινα παντελῶς προσαγωγήν, μεγάλην εὐδαιμονίαν δοκοῦσι περιποιήσασθαι δι' οὐδὲν ἕτερον ἢ διὰ τὴν τῶν τόπων εὐφυίαν, ἣν οὐδὲ συγκρίνειν ἄξιόν ἐστι τοῖς Ταραντίνων λιμέσι καὶ τόποις.*

[2] Lenormant, *La Grande Grece*, II, p. 14.

anchor type might properly allude, that the explanation here given seems justified.

THE COCKS AND ROSTRA BAR.

The Guard at the Straits During the First Punic War.

Plate VI.

There have been several interpretations of the types of this brick, but none of them is free from serious objections. The earlier theory was that the types had reference to some battle at sea, that being apparently the significance of the "tridents" and of the "fighting cocks," but that idea had to be abandoned, chiefly for want of a naval engagement to justify it. Then Garrucci showed that the supposed "tridents" were in reality the rostra of battleships, a suggestion more fully confirmed by Prof. Milani, a fact that should have aided the older explanation. In the two cocks Garrucci saw a representation of the augural ceremony of the *tripudium solistimum*, whereby the military or naval commander was warned of the fated issue of an impending engagement by the behavior of the sacred chickens: favorable if they should eat greedily, unfavorable should they refuse to eat; while the two stars referred to the Dioscuri, guardians of the sea-voyage, thus connecting the type with the action of a naval commander. One of the serviceable features of this explanation is that its generality permits the widest application of its meaning. Thus Prof. Milani suggested that the types alluded to the naval victory won by Duilius off Mylae in B. C. 260. Dr. Haeberlin objects to this purely on the ground of his own theory that no bars were issued after the institution of the denarius coinage in B. C. 268, an objection that begs one of the vital questions in his theory. A more serious objection, it seems to me, is the fact that the notion of a victory is not indicated by either of the types on the bar. And so enthusiastic were the Romans over the victory of Duilius that it is inconceivable that the State would issue this bar with types intended to commemorate that victory and yet fail utterly to give a plain and intelligible expression to the main idea.

Dr. Haeberlin in turn develops his own interesting views of this bar with much fullness. He connects it with the prow-series of bronze coins, of reduced standard, issued at Rome; the bar, however, for reasons of style, he holds, was issued, like the earlier examples, from the mint at Capua. At the head of this series of coins are a *Decussis* and a *Tressis*

whose types are head of Roma and the well-known prow, the Roma-head alluding to the sovereignty of Rome. Now the same general idea had to be expressed by the types of the bar issued in connection with that series. And that requirement is met by this bar, more or less obviously by the rostra, though one would naturally expect the prow here the same as on the coins. Accepting Garrucci's view that in the cocks we have a representation of the *tripudium solistimum* which the rostra and dolphins show was meant to have reference to the sea, Dr. Haeberlin concludes that the general significance of the types is Rome's claim of lordship on the sea—"Herrschaft . . . zur See."

Against this very ingenious interpretation it can be properly urged that sea-power is only won by victories on the sea, and, as we shall see below, Rome did not become a sea-power at all until after the First Punic War, nor had the Romans before that war built a navy of any considerable power, nor a merchant fleet; on the other hand, neither a victory nor sea-power can be appropriately commemorated by the representation of a ceremony that was customarily employed to ascertain in advance the fated issue of a particular engagement. The ancients had several ways of commemorating a victory and also the definite results of a successful war, but none of them was quite so far-fetched as would be the portrayal of a *favorable issue* of an engagement by the representation of a mode of prediction employed *before the beginning* of the action.

But the chief objection is found in the fact that at the time to which Dr. Haeberlin would assign this bar—that is, several years before B. C. 268—Rome was not a sea-power. Nothing could be more evident from the very terms of the treaty of alliance with Carthage made in B. C. 279, and quoted above. An offensive league with Carthage would have been the last measure Rome would have considered had she possessed a fleet able to cope with the limited naval resources of Pyrrhus or the experienced men and material to build one. And if we refer back to the commercial treaty[1] made with Carthage in B. C. 348 we find the facts to be even worse respecting Rome's power on the sea. "In that treaty," as set forth by Mommsen,[2] "the Romans had to come under the obligation not to navigate the Libyan coast to the west of the Fair Promontory (Cape Bon) excepting in cases of necessity. On the other hand, they obtained the privilege of freely trading, like the natives in Sicily, so far as it was Carthaginian; and in Africa and Sardinia they obtained at least the

[1] Polybius, III, 21. [2] Mommsen, *History of Rome*, Vol. II, p. 41 f.

right to dispose of their merchandise at a price fixed with the concurrence of the Carthaginian officials and guaranteed by the Carthaginian community. The privilege of free trading seems to have been granted to the Carthaginians at least in Rome, perhaps in all Latium; only they bound themselves neither to do violence to the subject Latin communities nor, if they should set foot as enemies on Latin soil, to take up their quarters for a night on shore—in other words, not to extend their piratical inroads into the interior—nor to construct any fortresses in the Latin land." And in the very next paragraph Mommsen mentions a treaty which Rome entered into with Tarentum and probably at the same period, by which "The Romans bound themselves—for what concessions on the part of Tarentum is not stated—not to navigate the waters to the east of the Lacinian promontory; a stipulation by which they were thus wholly excluded from the eastern basin of the Mediterranean." There is not the least evidence that any of the terms of these treaties had been changed in the interval up to the end of the war with Pyrrhus; and since the treaty of alliance with Carthage in B. C. 279 was made under stress of circumstances, it is not improbable that that power even more severely enforced the agreements with her possible rival.

Never did a free country subscribe to more humiliating conditions than did Rome in those two treaties. So far as she was concerned the western Mediterranean became virtually a Carthaginian lake which Romans might navigate only on sufferance of the African naval power or, as the Carthaginian ambassadors bluntly put it, "Against our will you (Romans) cannot even wash your hands in the sea," while they dared not dip an oar in the eastern waters. The only discernible compensation for such renunciation of her natural rights was the promise, of Carthage at least, to impose some restraint upon the activities of pirates who sailed from her harbors and especially of those who made it a business to plunder the Italian coast.

It is probable that in B. C. 348, and for long afterward, Roman state policy did not contemplate any oversea conquests, but was limited to the subjugation of neighboring nations in Italy, in order to secure themselves against future aggressions, and probably with a view of ultimately securing the sovereignty of the entire peninsula. If Rome had a fleet of warships before the end of the fourth century Roman historians seem never to have discovered trace of it. The Board of Fleet-masters (*duoviri navales*) created in B. C. 311 was more likely charged with the task of building and organizing a fleet than of taking over the adminis-

tration of one already in existence; for the fleet mentioned by Livy[1] is the first Roman fleet of which there is any record (cf Ihne, *Hist. of Rome, p. 421*), and that was in the year 310. When the First Punic War began the Roman naval power was still negligible.

Any theory, therefore, that this bar may have had reference to Rome's sovereignty on the sea is hardly tenable; and likewise is it impossible to associate the bar with a naval victory, because Rome had no naval victories to commemorate till late in the First Punic War, and probably no naval battles. For there are very good reasons to believe that Antium was taken by a land operation and the few (only six) pirate ships which harbored there were surrendered in accordance with the terms of the treaty of peace; and thus there was no naval victory over the Antiate fleet, which the rostra on the tribunal in the forum and on the bronze coins are supposed to commemorate.

The real significance of the types of this brick will probably be found, if ever, in a definite fact or event and not in any general idea. And there is such a definite event in the First Punic War to which these types might fitly allude.

In that war the control of Messana and Rhegium together with the intervening Straits was of the utmost strategic importance to the Romans. In fact the immediate cause of the first conflict between Rome and Carthage may have been rather the danger Rome saw was imminent if the Carthaginians in alliance with Hiero of Syracuse should succeed in capturing Messana than the other political and commercial considerations usually given. For the Romans realized that the possession of Messana by the Carthaginians was a javelin aimed at the vitals of the republic. The city's great harbor could accommodate six hundred warships[2] and would have afforded an excellent base for a great sea-power like Carthage, not only for military operations against Rome's newly conquered and yet insecurely held southern provinces, but also for plundering the coast towns. Of all these dangerous possibilities, Polybius says, the Romans were fully aware—that Messana to the Carthaginians "would be like a bridge to enable them to cross over into Italy."[3]

But it was after the struggle of the First Punic War had begun that the Straits and Messana assumed the greatest strategic importance to the Romans. Realizing the value of the city's fine harbor and dominant position, its sudden capture had been their first move in the war; there

[1] Livy, IX, 38.

[2] Diod. Sic., XIV, 56.

[3] See also *Zonaras*, *VIII*, 8: — *καὶ ἐς τὴν Ἰταλίαν ἐξ αὐτῆς* (Messana) *διαβήσονται.*

they had established a naval arsenal, equipped for repairing warships and furnished with large quantities of material for supplying the fleet. The protection of that arsenal, while important, was, however, only an incident in the more vital policy they had to pursue of restricting the operations of the Carthaginian fleet and preventing the interruption of their chief line of communications with Sicily. Both of these objects could be attained by a secure hold on Messana and Rhegium; for it was the judgment of ancient as it is also of modern writers[1] that the possession of these two cities carried with it the control of the intervening Straits.

It requires no extended portrayal of the situation to understand how it came about that the state of affairs at the Straits was throughout the war of the greatest concern. For effective control there meant closing of that narrow channel to navigation and thereby greatly hampering if not paralyzing the offensive operations of the Punic fleet, so distant for warships of that period were its bases, at the western end of the island, from the Italian coast and the chief field of activity; while merchantmen creeping along the Italian coast and likewise the coast towns, so often plundered in the past, were comparatively free from attack.

But the greatest calamity that could have befallen the Romans would have been to have their communications with Sicily interrupted. And not only was the line of communications by way of the Straits the chief one but the loss of that would have rendered the others impracticable. It is inconceivable how in that case the war could have been continued; for the Roman fleet would have been compelled to base itself on Tarentum or Naples, positions too far away to be effective, while it would have been impossible to supply or reinforce the army in Sicily. The loss of Messana in fact would have brought the war to a speedy conclusion and with complete victory for the Carthaginians. It was, therefore, of the utmost importance to Rome that strong contingents of warships be kept at Messana and Rhegium in order to close the Straits completely to hostile craft and protect their communications with Sicily. Polybius states that on one occasion the Roman communications were almost cut off, a sufficient hint that they were not preserved without challenge, yet there is no evidence that the interruption was of long duration or threatened to become serious. It is evident, therefore, that

[1] Thucyd. IV, 24; Siefert, *Messena und Rhegion*, p. 15. Wer Rhegion und Zancle (Messana) habe, auch Herr der wichtigen Meerenge sei.

the contingents of the fleet stationed at Rhegium and Messana—probably ships furnished by these cities whose sailors were well acquainted with those dangerous waters—formed a powerful force and maintained a vigilant guardianship unbroken for many years—a very notable achievement!

It is to that event that I venture to suggest the types of this brick allude. It was just the sort of an event that is apt to appeal strongly to the imagination, whether regarded merely as an achievement or of vital military and political importance, making its appeal, therefore, to all classes of persons. Events of that character are the ones most often chosen for medallic and kindred representations. It remains, then, to point out that the types of the brick appropriately represent the event.

On the obverse of the brick are two cocks in an attitude of alertness and vigilance; they are not fighting nor eating. They are here the *vigiles nocturni,* as Pliny calls cocks, and with the two stars they symbolize the popular notion of the birds' constant vigilance, by night as well as by day: Pliny, *N. H. X, 21, 24 Proxume gloriam sentiunt et hi nostri vigiles nocturni quos excitandis in opera mortalibus rumpendoque somno natura genuit. Norunt sidera et ternas distingunt horas interdiu cantu.*



Fig. 2. Bronze coin, of Caiatia.

The cock-and-star type is found on the bronze coins of Aquinum, Caiatia, Cales, Suessa, Teanum, and Telesia, where the accepted explanation, as given by Garrucci,[1] is, to employ the language of Mr. Head, (*Hist. Num. p. 27*), that "all these towns had probably concluded an alliance on favorable terms with Rome, by virtue of which they were permitted to issue bronze coins in their own names down to a comparatively

[1] Garrucci, *Monete d. Italia Antica*, p. 77, under *Aquinum:* Aquino. . . . deve annoverarsi fra le città che ebbero un trattato di alleanza con Roma, come il fa suppore l'uso che gli Aquinati fanno della lingua latina nella moneta, al pari del Teanesi, dei Caiatini, di Calvi e Sessa colonie latine, che battono un simile nummo col tipo del gallo (che canta, dietro un astro).

late period." Thus the cock of vigilance with the star symbolizes the unbroken watchfulness with which these communities engaged to guard their pact with Rome. (*Fig. 2.*)

In the case of the brick, the two cocks are standing, turned toward each other, in an attitude of extreme alertness, ready to spring forward, but not at each other: there is not the remotest trace of anger apparent in the drawing of the two birds as is best shown by Garrucci's plate No. XVIIII. Their attitude shows that the object of their vigilance lies at a point between them. The concrete forces whose watchfulness these cocks symbolize and also the object of that watchfulness are suggested by the reverse type, where we have two battle-ship rostra turned toward each other and toward a body of water that lies between them, the water being symbolized in the usual way by means of dolphins. These dolphins are represented swimming from opposite directions in between the rostra, positions which might be interpreted to symbolize recurrently flowing water and so specially appropriate for the Sicilian Straits. But it is never desirable to carry to the uttermost possible detail the interpretation of a symbolic group, nor is it here necessary to descend to details where the general meaning suggested for the type is so fitly expressed.

The naval forces to which these rostra allude must, of course, be the warships the Romans kept stationed at Messana and Rhegium.

It will help us to realize the importance of the event to which the types of this brick are here thought to allude if a similar event in the present European War is taken into consideration. One of the proudest achievements of the British navy has been its unbroken success in guarding the line of communication across the English Channel. It is perfectly realized how vital this matter is to the English in order that they may be able to reinforce and supply the huge armies operating in France; and yet it is no more vital to them than it was for the Romans to protect a similar line of communication across the Straits with their army and navy operating in and around Sicily. As to the suitability of the types to commemmorate such an event there seems to be little question. In fact an artist at the present day would find the Cocks of Vigilance very suitable symbols of the alert watch the British fleet has kept on the Channel and the battleship rostra appropriate emblems of the force that has made it secure for the transport service.

I will not hazard a suggestion as to the place where the brick might have been produced, except that it was probably at some Greek town not far from the scene of the event that formed the subject of the types.

Certainly I should not entertain the view that it was produced by the Roman government.

VII.

Six of the nine extant specimens of Greek bars have been discussed and explanations of their types suggested. This is a far larger number than the object of this paper required, for two or three of them would sufficiently illustrate their non-Roman origin, provided of course the explanations offered should in some cases at least prove to be correct. The remaining examples of *aes signatum* it is my purpose to discuss in a fuller treatise of the whole subject and hopefully in the near future.

The most important bearing of the foregoing explanations is still upon the general question of the purpose of the bars; for the whole tendency of the evidence afforded by those explanations is to deepen suspicion of all the theories by which it has been attempted to connect these large bronze pieces in some way with the traditional *aes signatum* currency of Rome or to show that they were at a later time issued by Rome from a government mint for use as money or for some other public purpose. For if the above interpretations are correct, hardly one of the six pieces discussed bears types that the Romans would have chosen as suitable for a state issue of such a bar, whatever its purpose may have been. Nor would this conclusion be greatly weakened if it should be shown that some of the suggestions that have been ventured are untenable; for if, as stated before, it can be proved that even one of the bars because of the meaning of its types is indisputably of other than Roman origin and, therefore, could not have been produced at a Roman mint or have had anything to do with the Roman or any other currency system, then the wider conclusion is almost forced upon us that the Roman government had nothing to do with the production of the rest of them. This would certainly be true of the so-called Campanian bars; and if this group be thrown out of the account, then the various theories that have hitherto been advanced and more or less widely accepted in regard to the extant specimens of the *aes signatum* must be greatly modified. For it is upon examples of this small group, the fine specimens in the best style of Greek art, such as the *hog-and-elephant* bar and especially the *eagle-and-pegasus* example with its suggestive inscription ROMANOM, that Mommsen, Garrucci, Milani, Haeberlin, as well as other earlier and later writers, have principally based their views of the whole subject. They have evidently held that in the main whatever could be established with

reference to these examples must hold true of the other and cruder specimens. And that position is undoubtedly correct; so that vice versa whatever of their theories may be disproved with reference to the "Campanian bars" must apply also to all of the quadrilateral bronze bricks.

While that view of an identical purpose for all the extant bars, however much they differ in the details of composition and types, seems undoubtedly sound, yet the explanations of the types given above, because of their apparent allusion to important events, almost inevitably suggest the query whether the Greek bars may not have been intended primarily as commemorative plaques with no special utilitarian purpose. Indisputably such commemorative plaques, approaching closely to the modern medallic plaque, have not hitherto been known to have existed among the Greeks and Romans. But from an early date the commemorative coin-type was employed sporadically by the Greeks, in fact much more extensively throughout the Greek world, there is reason to believe, than has been generally recognized. Commemorative types are particularly remarkable in the coinage of the western Greeks of Magna Graecia and Sicily. And it was the western Greeks, too, who extended the practice of issuing commemorative coins to include, besides local myths and local physiographic features, also the commemoration of historical events;[1] or perhaps it would be better to say that, while the older Greek communities often celebrated important events by striking new coins with types presenting simply a more beautiful effigy of the patron deity of the city to whose help their successful issue was ascribed, the western Greeks frequently struck coins whose main types or adjuncts more particularly alluded to the specific event.

Now these great bronze plaques are of course far removed from commemorative coins. They might be regarded as holding a position somewhere between the medallic coin and the fixed bronze commemorative tablet. Moreover, the mere fact that the other Greeks are not known to have made use of such monuments as medallic plaques would hardly constitute a fatal objection to a suggestion that such was the purpose for which these bars were produced by the Italian Greeks; for the independence and originality of the Western Greeks were manifested in many ways and notably in certain extraordinary features of the coins struck for centuries in Magna Graecia as compared with the coins of the rest of the Greek world. Should one hesitate to regard as commemorative plaques those examples which were produced while the Greeks yet

[1] McDonald, *Coin Types*, pp. 92, 110; Reinach, *L'Histoire par les Monnaies*, p. 9 ff.

retained their independence, less doubt might justifiably attach to those datable in a period subsequent to the conquest and the establishment of the Roman domination. For after the conquest those cities suffered considerable restriction of the right of coinage in the precious metals if they did not lose that right altogether, while the issues of bronze coins apparently ceased at some cities and became uncertain at others; and thus deprived of the opportunity of striking coins to commemorate an event, or give expression to a political sentiment, the cities, or rather private persons, might have had recourse to these plaques; and the plaques would the more readily commend themselves as suitable for the purpose because they were so unlike the inhibited coin in form and size as to avoid any complication with the Roman authorities.

While the suggestion just made arises naturally from the very character of the explanations that have been given of some of the types, yet for reasons already stated it is hardly to be entertained seriously; for it would explain the purpose of but a part of the extant bars, whereas it is most probable that they were all intended for the same use.

VIII.

Now if the Greek bars have with some degree of probability been shown to have originated elsewhere than at a Roman mint and under other than Roman influence, and therefore most likely intended for other use than as money, then certainly it becomes increasingly difficult to regard the bars attributed to Central and Northern Italy as specimens of *aes signatum* produced by either private persons or by communities for use as money. For the alloys of this latter class of bars lend no support to the money theory, while their types are without significance and too commonplace to connect their issue with any particular places. There are, however, certain interesting facts observable in the devices found on some of these bars that may be mentioned chiefly because they seem to dispose of a few curious views that have been advanced regarding two varieties of them.

On the grounds of provenience and the evidence of coins found along with certain of these bars various conjectures have been made as to the date and place of their production. And in the case of one group Dr. Haeberlin holds that the type also confirms the evidence of provenience. These are the fragments which bear the character Ⱥ (Pl. VII), interpreted by Haeberlin as a ligature of TA, an abbreviation of Tachna, *i. e.*, Tarquinii, the ancient site in whose vicinity, at Corneto, the bars were

found. It is needless to point out that a ligature of TA in such form would be very unusual, quite unique, I believe.

No more acceptable is the view of Garrucci, followed by Willers, that the character is the simple Roman letter A, and that we have the mark of value ∢III = *Asses tres*. For that form of the letter A, with the cross-bar extending beyond the side-strokes, would also be unique, I believe; at least I have been unable to find a parallel to it. Nor does the suggestion of Willers that the cross-bar was so extended in order to fill the space about the letter help matters.

In this device and also in that of the two crescents (Pl. VIII, 4) we have the results of a simplification of earlier forms of the types, the evolution of which can be traced rather fully in the case of the latter. There was a tendency toward simplification of the so-called fish-skeleton or leaf types,[1] by reducing the number of "spines," or leaves, the admittedly later specimens having a smaller number in a given length than the earlier ones. No. 1, Plate VIII, has a much later form of the device with but two pairs of "spines" on the stem, heavy in form and approaching the general shape of crescents. Whether the entire bar had more of such members than appear on the extant fragment cannot of course be determined. No. 2 of the same plate probably had two pairs as there was likely another pair at a lower point on the stem and perhaps turned in the opposite direction.

The next change in the device consisted in omitting the stem and to take its place in filling the field there was introduced a sort of star, possibly two stars, Pl. VIII, No. 3. In the final form there were but two pairs of spines or leaves conventionalized into crescent-shaped devices at the ends of the ingots, the intervening field being left plain (No. 4).

It should also be noted that the curved ornament on the reverse of the small brick No. 2 is very similar to that on the broad No. 1. The two pieces were apparently produced in the same *officina* and mark a transition from the large to a smaller form of ingot.

A similar evolution of the *ramo secco* type is shown by Nos. 1, 2, and 3, of Pl. VII resulting in the character resembling somewhat the Roman letter A. The central stem of the earlier device, whatever it may have been intended to represent, has here given way to a series of short lines, a sort of cross-hatching to fill up the field. And since the cross-bar of what has been often taken for the letter A is of the same length as the

[1] More likely, as Garrucci has pointed out (*Mon. d. Ital. Ant.*, p. 5), the type represents a conventionalized leaf.

other short lines above the fork, it is rather to be considered as merely one of those lines than as a part of a quite unusual if not impossible form of the letter or a ligature of TA.

IX.

It seems, therefore, that the arguments hitherto urged in favor of the theories that these bars are specimens of *aes signatum* issued by the state for ceremonial and monetary uses are insufficient. On the other hand, for more or less positive considerations the conclusion, already tentatively advanced in regard to some varieties but generally rejected, that they were merely commercial ingots seems most likely to be correct. Some of them are ingots of unrefined copper or of scrap copper (*aes collectaneum*) probably destined for the refineries, others prepared by the refiners to supply the large number of artisans engaged in the manufacture of the numerous articles, both useful and ornamental, then so commonly made of bronze. These ingots were, of course, the products of private enterprise; and the types they bear are to be regarded as trade-marks to identify the products of a manufacturer.[1]

The manufactures of bronze in antiquity were very extensive and of wide variety, as is attested by the writers and by the great accumulations of antique bronze objects brought together in our museums. Large factories, such as modern times have produced, were then the exception, bronze manufactures for the most part coming from the hands of numerous artisans working in small shops of limited equipment and capacity. Since these artisans would rarely have either the ability to assay a mass of copper of unknown alloys or the means of refining it and then making up the alloy they required, it was plainly necessary for them to procure their supplies of copper or bronze in a state ready for use. Nor was that practice followed by the ancient artisan solely because of his defective equipment, but also because it was certainly cheaper; for which reason in our own times even large consumers not uncommonly follow the same practice and secure their supplies of bronze in the required alloy rather than make the alloys themselves. The Elder Pliny has allusions to numerous refineries (*officinae aerariae*) throughout Italy where copper pigs (*panes*) were refined and prepared in various alloys for the requirements of the makers of bronze articles and for artists. While it is not a fact to be insisted upon too strongly, yet it is interesting that the

[1] See Darmberg et Saglio, *Metallum*, p. 1865, for examples of large ingots of lead and other metals with trade-marks.

analysis of some of the extant ingots shows a considerable agreement with the figures given by Pliny for certain alloys[1] produced for consumers in his time. For example, two fragments of these ingots show respectively 8.22% and 6.3% tin and no other alloy, which compares very well with Pliny's *aes Campanum* alloyed with 8% of tin (*plumbum argentarium*) by the refineries in the provinces of Italy except at Capua, where 10% of tin was used.

The view that these bars were commercial ingots helps us to a rational explanation of certain facts which have perplexed those who found it difficult to accept the theories that they were issued for use as coins or money and have misled the exponents of such views. For instance, it has been accepted as a sound principle that the discovery of bars along with specimens of the heavy bronze coins warranted the conclusion that the bars had been issued for use as money. Thus Willers states clearly: Aus diesem wertvollen Fundnachricht (*i. e.*, that bars with the character resembling the letter A were found together with heavy bronze coins) *ergiebt sich also, dass unsere Barren neben Roh- und Schwerkupfer als Geld gedient haben und der Zeit von etwa 300 bis 250 v. Chr. angehören.*[2]

On the contrary quite as logical and more probable is the inference that the heavy bronze coins were, at the time the hoard was buried, being converted to the same use as that for which the ingots were made. For in about 290 B. C., possibly as late as 286, the weight of the *As* was reduced by one half, and repeated heavy reductions brought the bronze coinage down to the triental standard by B. C. 268. It is not known that the Roman government made provision for the exchange, without loss to the holder, of the heavy coins for the new ones of lighter weight; it is not improbable that they did. But experience has shown that in spite of such measures a considerable proportion of the issues it is desired to replace will always be retained by the public. This result was assured in the case of the Roman *aes grave* by the very rapidity with which repeated reductions of standard followed each other. And after the coins of the older and heavier standard had become worth as much

[1] Pliny *N. H.* XXXIV, 820, 20; *aes Campanum*, "utensilibus vasis probatissimum"; two varieties, (1) produced at Capua, 90% copper and 10% tin (plumbum argentarium), (2) produced elsewhere in Italy, only 8% of tin.

Aes statuarium, 12½% of tin, one third of the whole being of scrap copper (*aes collectaneum*).

Aes Graecanicum, 85% copper, 10% lead (*nigrum plumbum*), 5% tin (*plumbum argentarium*).

Aes ollarium, copper and 3% to 4% of tin.

[2] Willers, *Italische Bronzebarren*, *Num. Zeitsch.*, 1904, p. 28.

in the metal market as when exchanged for the new and smaller coins, or possibly more, it was but natural that large quantities of the former should be converted to use in the arts; and the finding of *aes grave,* some of them in fragments, along with commercial ingots of bronze shows that such was the practice.

Again, the fact that most of the bars have been found in a fragmentary state has been considered by many scholars as strong proof that they were issued for use as money; for it is held that, whenever it was desired to obtain a sum less than the value of an entire bar, the practice was to break off from it a piece of the necessary weight and value. The absurdity of this theory has been pointed out repeatedly and its chief weakness has been stated above. Considering the bars as money, in any sense, the breaking of them into fragments would be most remarkable; but it is not difficult to understand why commercial ingots should be found in fragments; it is in fact just what an expert worker in bronze would expect. For at the present time, with greatly improved facilities for melting bronze, including an abundance of cheap gas, it is the very common practice to reduce the ingots to fragments because the smaller pieces pack better in the crucible and at the same time the surface directly exposed to the heat is thereby greatly increased.

The form in which bronze and copper appeared on the Italian markets ready for the artisan's use is something we do not know. But it is well known that the form of the commercial ingots of gold and silver was quadrilateral and that such ingots were technically known as "bricks," *lateres.*[1] It does not follow, of course, that the bronze ingots, refined and in the various alloys the trade required, had the same form and designation as those of the more valuable metals. But if we accept the views of some investigators, there was a time in Italy when copper was considered much more a precious metal than it was in historical times, and that is probably true; so that it is not a far-fetched inference that the term *later* as well as the brick-form was first employed for bronze and was subsequently adopted for gold and silver ingots when these metals became more abundant in the country. However that may have been these bars have a form quite foreign to that of any acknowledged coin in antiquity, while they do have one of the recognized metal ingot forms.

[1] Compare the gold bricks found at Sirmio, now in British and Pesth museums. See also Varro, *Vita, P. R.*, in Nonius, p. 520: lateres argentei . . . . in aerarium conditi. Pliny, *N. H.*, XXXIII, 3, 17: C. Caesar primo introitu urbis civili bello suo ex aerario protulit laterum aureorum $\overline{XV}$, argenteorum $\overline{XXX}$, et in numerato $\overline{|CCC|}$: and Tacitus, *Ann.*, XVI, 1, 2.

That among the Greeks the refiner's trade-mark should have undergone a marked development and become a device adapted to the size and form of the comparatively small ingot prepared for the manufacturer and bronze founder and that the device should have been executed by a really clever artist can hardly occasion any surprise; while the influence of contemporary political events upon the subjects chosen for the devices was certainly nothing inconsistent with the independent thought and practice of the western Greeks.



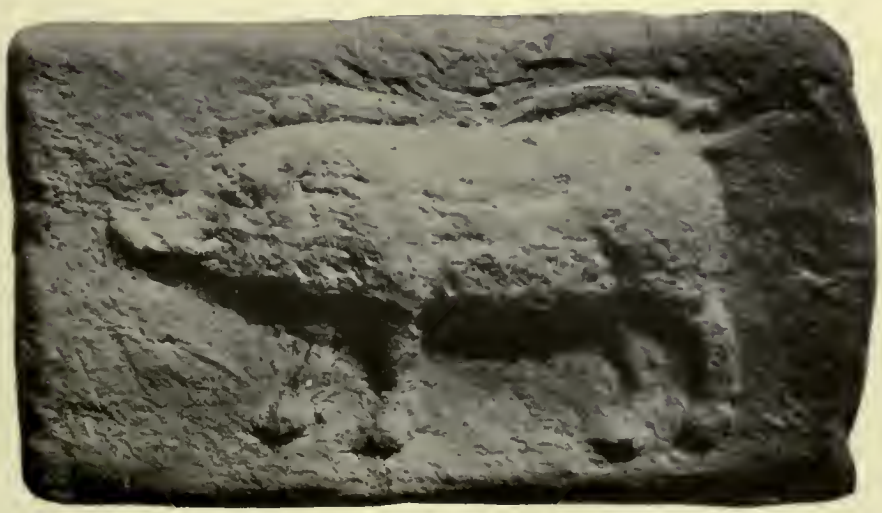
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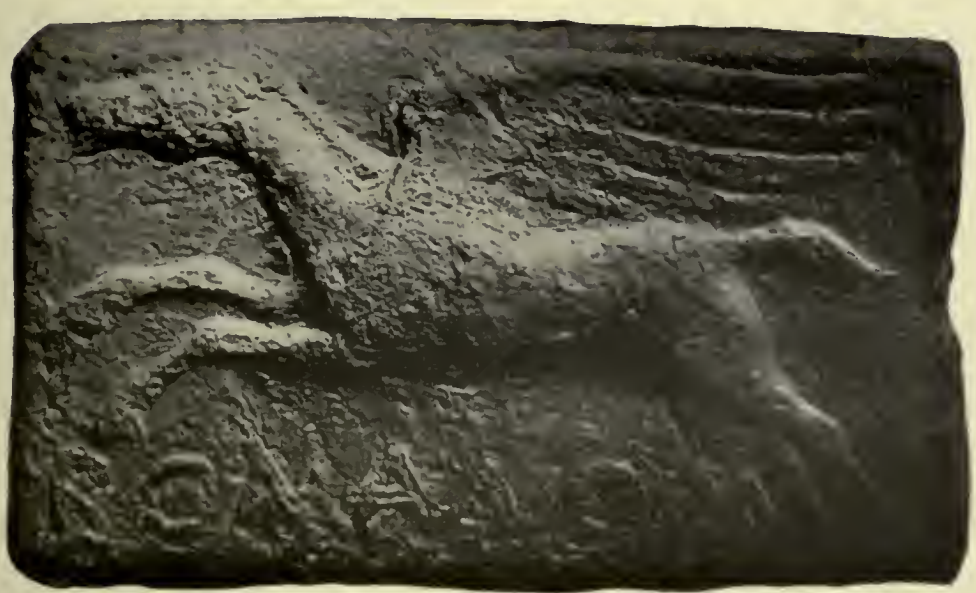
TYPE OF *TRIPOD—BARLEY-EAR* BAR RECONSTRUCTED FROM TWO FRAGMENTS OF DIFFERENT BARS.



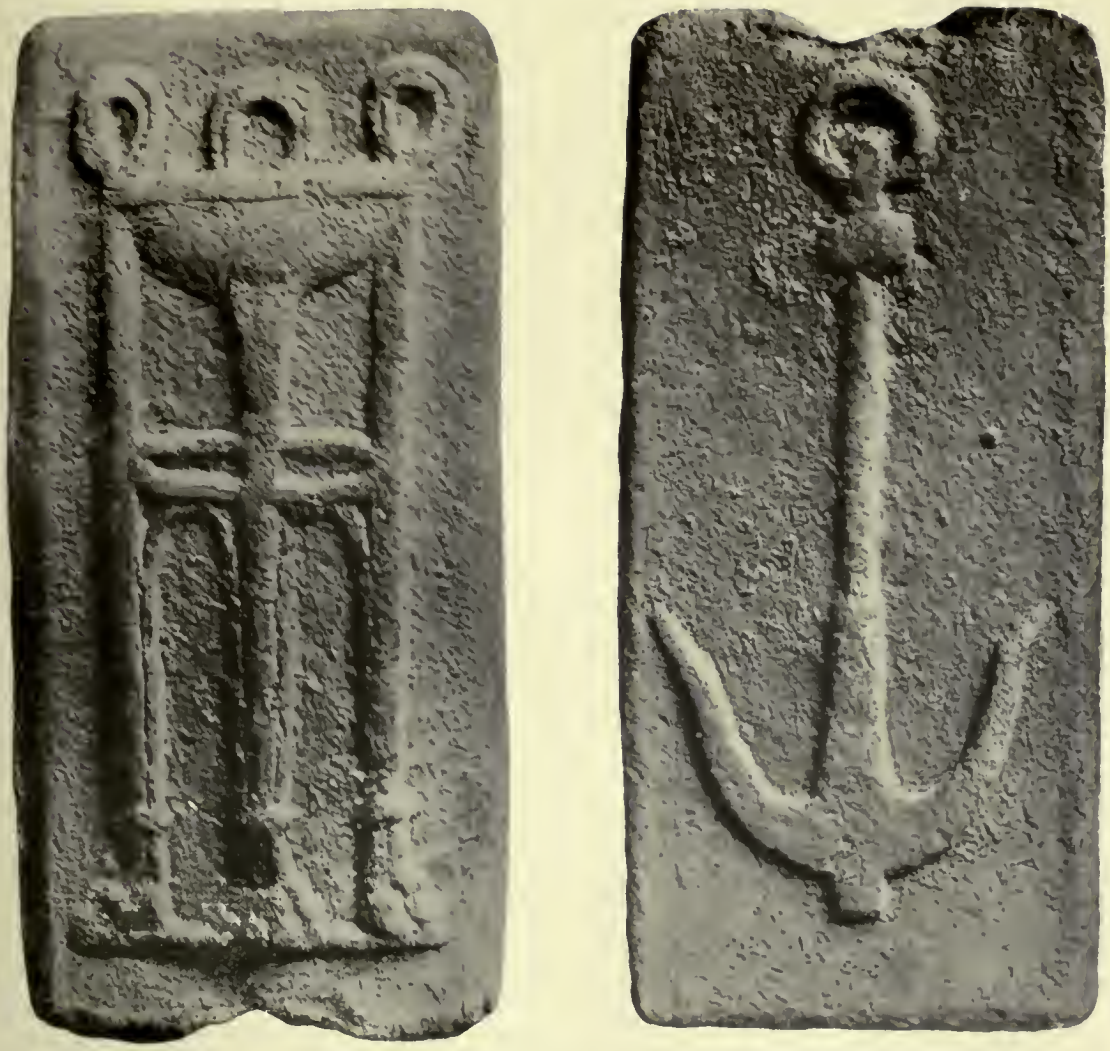


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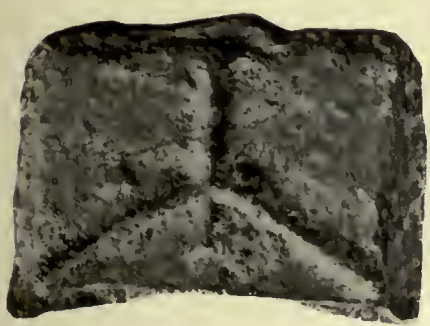
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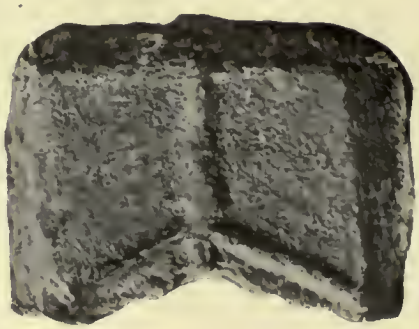
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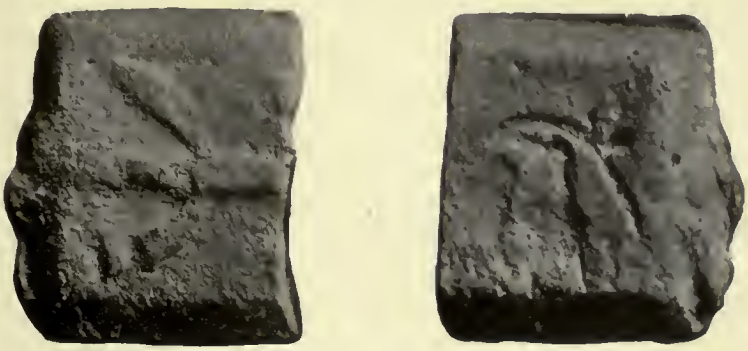


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U. S. POSTAGE STAMPS AS NECESSITY WAR MONEY

By HENRY RUSSELL DROWNE

In the early part of the Civil War the prospect of a long struggle between the North and South caused the people of the North to hoard their money. Gold, silver and copper money in circulation to the extent of many millions of dollars, disappeared in a comparatively short time as if by magic. In consequence people and tradesmen found themselves without the means of carrying on the smallest money transactions without great trouble and inconvenience. This was in part due to the desire of the timid to save something of actual value from the threatened wreck of the Union, and to the foresight of the avaricious to hoard what might soon command a large premium.[1] Trade actually suffered severely for want of small change and even stage, street car and milk tickets were temporarily pressed into service. This resulted in the voluminous issue of the well known "shinplasters"[2] and "copperheads,"[3] but there was an intervening period before the engravers, lithographers and die sinkers found occupation, when on account of the immediate necessity and for want of a better medium, *postage stamps*, of the issue of 1861, were used as a substitute for small change.[4]

It was only natural that in the early days of the great emergency attention was directed to this only remaining issue of the Government

[1] Large amounts of silver coin were exported to Canada and South America, and a premium of from 10 to 12 per cent was offered for small amounts by business men who desired it for convenience in making change.

[2] Promissory notes of small value, generally from one cent to one dollar, issued by merchants, institutions and corporations, redeemable either in goods or in stated amounts at their place of business. The term "shinplaster" originated in the days of the War of the Revolution when the Continental currency had become almost worthless.

[3] Metal tokens issued to take the place of cents during the Civil War, 1861-1865. Many bear the Indian head copied from the small United States cent, patriotic and other designs were also used in great variety. They were made principally in 1862 and their use was prohibited in 1863. The term "copperhead" applied particularly in the early days of the Civil War to Northern sympathizers with the Confederates, — disloyal persons.

[4] The Postmaster General in his report of December, 1862, says, "In the *first quarter* of the current year, ending September 20th, the number of stamps issued to postmasters was one hundred and four million dollars; there were calls for about two hundred millions, which would have been nearly sufficient to meet the usual demand for the year. This extraordinary demand arose from the temporary use of these *stamps* as a *currency* for the public in lieu of the smaller denominations of specie, and ceased with the introduction of the so-called 'postal currency.'"

that represented money, and people unhesitatingly accepted even this flimsy substitute as a circulating medium. Unfortunately postage stamps were not adapted to stand the wear and tear of barter and trade and it was soon apparent that they would stick to anything else, just as readily as they would to a letter. (Extract from an old song)

"The till I keep here in my pocket so safe,
I light up my kerosene lamps;
At daylight I put up my shutters so tight,
Then go in *to count up my* STAMPS."

E. Harrigan.

The writer well remembers his father telling of the difficulties encountered, during the winter of 1861-1862, in trying to pay his six cent fare in a Broadway stage on a cold stormy night with postage stamps. He described the trouble arising when change had to be made and how when the driver tried to pass back the change through the little hole, high up in the front of the stage, where you pulled a bell to attract his attention, the stamps would stick to his wet woolen gloves and were hard to pick off; and you occasionally had to make him put his hand back a second time to get them. Sometimes, also, they fell and were lost in the straw on the floor of the stage, and when wet you had to hold them carefully until they dried, before you could put them in your pocket book. This was an exasperating method, but was the best substitute then in sight. The stamps used for money became quickly soiled and defaced, and for their better protection, as well as for convenience of assembling them in stated amounts, little envelopes to hold them were made.

Unfortunately, this method adopted in a hurry to help people out of their difficulties did not prove an entire success, for the stamps could and would stick to themselves as well as to anything else, so their career covered only a brief period of time. They had their day, passed away quickly and have now been long forgotten.

The custom of using envelopes for stamps seems to have been confined almost entirely to our large cities, and after several years of careful search the writer has so far located them in New York City, Albany, Brooklyn and Jersey City, but he has been informed that some few were made and used in Philadelphia.

The denominations found by the writer are as follows: 10, 13, 15, 20, 25, 30, 50 and 75 cents. Those for 25 cents are by far the most common, about half as many are for 50 cents, and a quarter for 10 and 75 cents, and the 13 cent in only one instance.

Denominations were frequently altered on the envelopes with pen and ink,[5] as shown on the illustrations, and several issues have the space left blank so that the value of the contents could be filled in. The writer has so far been able to list ninety separate issues of different designs which can be summed up briefly as, patriotic 15, stationers 29, theatres 7, business, etc., 25, nameless 16 and home made 1. The following is a list of the different imprints found on these envelopes:

Business Firms, etc.

H. Armstrong, Hosiery, Laces, &c.,	140 Sixth Ave., New York
Joseph Bryan, Clothing,	214 Fulton St., Brooklyn
G. C. Brown, Segar Store,	669 Broadway, New York
P. D. Braisted, Jr., Billiard Hall,	14–16 Fourth Ave., "
Chas. T. Chiekhaus, Segars & Tobacco,	176 Broadway, "
Crook & Duff, Bar, Lunch & Dining Room,	39–40 Park Row, "
Mad. A. Doubet, Importer, &c.,	697 & 951 Broadway, "
Francis Duffy, Oyster & Dining Saloon,	239–241 Eighth Ave., "
Fox's, Old Bowery Theatre,	"
German Opera,	485 Broadway, "
Gould's Dining Rooms,	35 Nassau St., "
Harlem & N. Y. Nav. Co.,	Sylvan Shore and Sylvan Grove
James, Hatter,	525 Broadway, New York
Lansingh's, Gents Furnishing Store,	Albany, "
Hy. Maillards, Confectionery, &c.,	621 Broadway, "
Mercantile Dining Room — B. Letson,	256 Broadway, "
Miller & Grant, Importers, Laces, &c.,	703 Broadway, "
National Express Company,	74 Broadway, "
New Bowery Theatre — J. W. Lingard,	[2 types] "
N. Y. Consolidated Stage Co.,	"
Niblos Garden — Wm. Wheatley (Edwin Forrest),	"
" " " " (Ravel Troup),	"
Nixon's Cremorne Garden — Palace of Music, &c.,	14 St. & 6 Ave., "
Chris. O'Neills, Liquor Store,	Hudson Ave., Brooklyn
Oyster Bay House,	553 Broadway, New York
Pettit & Crook's, Dining Rooms,	136 Water St., "
Capt. Tom Reeves, Billiard Saloon,	214 Broadway, "
Thomas Richardson Agt., Chop, Steak & Oyster House,	66 Maiden Lane, "
Taylors Hotel,	Exchange Place, Jersey City
The Oyster House,	604 Broadway, New York
James Wiley, Wines, Liquors & Segars,	307 Broadway, "

[5] The most unusual example of this is one changed from 75 to 90 cents.

Mr. Thomas Cunningham in an article published on page 75 of the American Journal of Numismatics for 1893, states "the New York Central Railroad utilized postage stamps by enclosing various amounts in small envelopes which were used as change." The writer has never met with any of these, but without doubt this statement is correct.

STATIONERS, PRINTERS, ETC.

Bergen & Tripp,	114 Nassau St.,	New York
Berlin & Jones,	134 William St.,	"
John M. Burnet,	51 William St.,	"
Clarry & Reilley,	12–14 Spruce St.,	"
B. F. Corlies & Macy,	33 Nassau St.,	"
Cutter Tower & Co.,	128 Nassau St.,	"
T. R. Dawley,*	[3 types] Reade & Centre Sts.,	"
Embree,	130 Grand St.,	"
Arthur, Gregory & Co.,	[2 types] 39 Nassau St.,	"
Hamilton Johnston,	545 Broadway,	"
C. O. Jones,	76 Cedar St.,	"
Kaiser & Waters (by Dawley),*	104 Fulton St.,	"
Leach (J. Leach),	[8 types] 86 Nassau St.,	"
D. W. Lee,	[2 types] 82 Nassau St.,	"
Macoy & Herwig,	112–114 Broadway,	"
Frank McElroy,	113 Nassau St.,	"
W. H. Murphy (by D. Murphy's Son),	372 Pearl St.,	"
Wm. Murphy (name on back),	438 Canal St.,	"
S. Raynor,	118 William St.,	"
Wm. Robins,	[2 types] 51 Ann St.,	"
R. Scovel (Reuben Scovel),	[2 types] 26 Nassau St.,	"
H. Smith,	[3 types] 137 William St.,	"
Sonneborn,	[2 types] 130 Nassau St.,	"
Dion Thomas,	142 Nassau St.,	"
R. D. Thompson,	104 Fulton St.,	"

It seems useless to attempt to enumerate or describe those that bear no names whatsoever, as their general character is similar to the others. Some of the envelopes have denominations on both back and face, the majority are marked U. S. or United States Postage Stamps, but in some cases only the name Postage Stamps, P. O. Stamps, United States Stamps or U. S. Stamps is used, and a few bear only the denomination. There are also some that have peculiar titles, as for example:

"Uncle Sam's Change"	on Chris. O'Neill and Pettit & Crook
"Legal Currency"	on Harlem & N. Y. Nav. Co.

"U. S. Official Documents" on Hamilton Johnston
"Government Currency" on Reuben Scovel

The greatest variety and the largest quantity appear to have been issued (twenty-five varieties having been listed and on one set alone we find the denominations 10, 15, 20, 25, 30, 50 and 75 cents) by the stationer J. Leach of 86 Nassau St., New York City, where this business is still conducted.

Patriotic designs with flags, eagles, shields, etc., were numerous. The portrait of Washington appears to have been the only one used, and has been found in only one instance (by Hamilton Johnston). They were variously printed with black, blue, red and green ink on white, amber, lemon, pink, orange, violet, blue, pale green, buff, manila and brown paper; but for all this red, white and blue, that is red and blue ink on white paper, seems to have been the most popular combination. There was no elaborate work employed in their manufacture, wood cuts and electrotypes seem to have been generally employed, although the majority were only type set and all show evidences of having been hastily made and printed. When assembled, however, there is a marked variety and they make a novel and attractive collection.

The metallic "Encased Postage Stamp"[6] has been enthusiastically collected for many years, but these envelope containers, which preceded even these, seem to have escaped attention, and have now almost entirely disappeared. In Newport, R. I., on July 4, 1862, notes were issued by William Newton & Co.,[7] for 5 and 10 cents, each note having stamps pasted thereon — thus for example the five cent note in possession of the writer has two one-cent and one three-cent stamps, and the ten cent note has three three-cent and one one-cent stamps. Designs were also made for similar 25 and 50 cent notes, but none were ever issued. In only one or two instances were any notes of this singular character, combining a printed bill with the value pasted on in United States postage stamps, known to have been issued.

It is quite evident that the necessity which caused the use of postage stamps as a substitute for money, resulted in the issue of the United States Fractional Currency and the caption under which it first appeared,

[6] Unused United States postage stamps framed in a circular case, the front protected by a sheet of mica, and the metal back embossed with advertisements. All have in small letters "Pat. Aug. 12, 1862, J. Gault," and were issued in July and August, 1862. See the excellent article by Mr. Ben G. Green of Chicago, on page 299 of the Numismatist for September, 1912.

[7] See article on page 350 of the Numismatist for July, 1913.

"POSTAGE CURRENCY"[8] with facsimiles of the five and ten cent stamps then in use made in similar perforated sheets, is significant of this, and shows that the Government fully appreciated the services stamps had rendered temporarily as a natural currency.[9]

It may be of interest to call attention to the fact that in the present war with Germany postage stamps are being used in France as a substitute for small change encased in transparent paper sealed with a paster on the back bearing the name of the firm that issued them, as for example "Au Bon Marché, Paris." The Russian government also resorted to stamps on account of the lack of small change, and reissued the stamps commemorating the third centenary of the founding of the house of Romanoff, on thick paper with an inscription on the back stating that they were exchangeable for silver. Madagascar put into circulation the regular postage stamps mounted on thick cardboard with printing on the back, as a substitute for small change.

This very interesting issue now first particularly described and enumerated is really a connecting link in the history of the Civil War money of the United States. The story told by these humble bits of paper is soon done. It has been well said, that as regards the substitute for money, in itself of little value, there can exist no motive to record other than the truth.

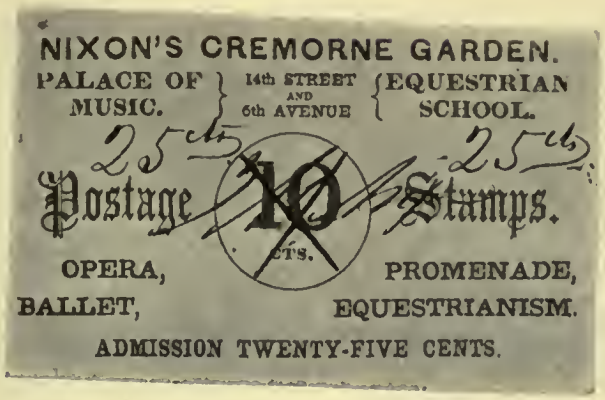
The writer desires to express his thanks to Messrs. Hiram E. Deats, Charles L. Moreau, Howland Wood and F. C. C. Boyd for valuable assistance and co-operation in his search for this material.

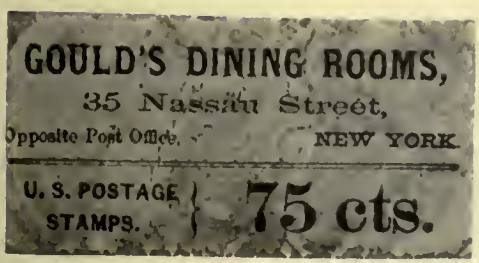
[8] On July 17, 1862, an act was passed which authorized the issue of "*postage and other stamps* of the United States;" which were receivable in exchange for United States notes, and in payment of all dues to the United States, in sums of not less than five dollars. Under this law, notes of the denominations of 5, 10, 25 and 50 cents were issued. These notes were issued in August, 1862, and continued in use until they were replaced by the fractional currency authorized by the act of March 3, 1863. The total issue amounted to $368,724,079.45. The previous act (of 1862) prohibited private corporations, banking associations and individuals from issuing or circulating notes for fractions of a dollar, and imposed a penalty, upon conviction, etc.

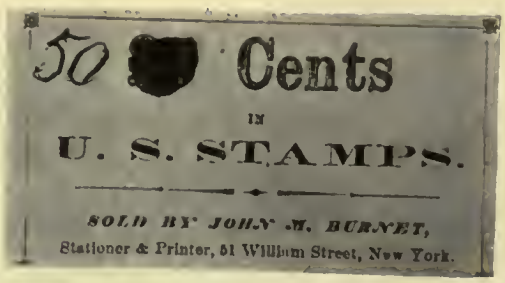
[9] From the use of postage stamps as money in 1861–1862, bank notes, greenbacks, fractional currency and any other paper money have since been frequently alluded to as *stamps*.

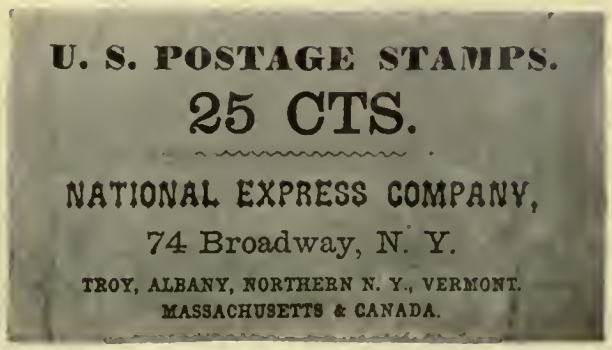

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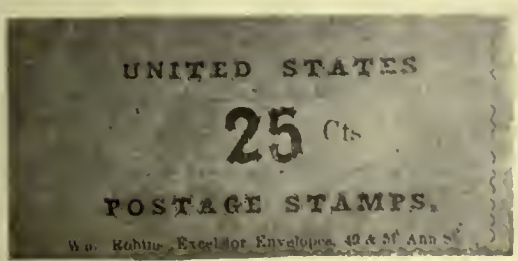

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10


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UNITED STATES
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POSTAGE STAMPS.

TARSOS UNDER ALEXANDER

By E. T. NEWELL

In the early spring of 333 B. C. Alexander the Great and his Macedonians looked down from the passes of the Taurus upon the broad and exceptionally fertile[1] plain of Cilicia. Tarsos the capital and principal city of the fourth Satrapy of the Persian Empire lay but a few days march away. As in a similar case, sixty-eight years before, when another Greek army, made ever famous by the stirring narrative of Xenophon, stood upon this spot the Persian ruler of Cilicia dared not oppose them. Again the exultant Greeks, now under their hero-king Alexander, marched down into the luxuriant plain and, encountering no opposition, entered the gates of Tarsos. In deference to this rich and populous province, its strategical situation between East and West, and the numerous Greek settlements that dotted the coast, Alexander spent several months within its borders. He used this opportunity to pacify some of the surrounding mountain tribes who were threatening the security of the district as well as the great land route which traversed it. This highway formed his principal line of communications with the west, for the Persian fleet had not yet been definitely overcome. Visiting the important seaport of Soloi he imposed a fine of two hundred talents upon the inhabitants, as he had reason to suspect that they were more inclined to favor the Persian king than the new régime. He also placed a garrison in the citadel, but to win over the Greek population to his side granted them a democratic constitution. Great games and races were next celebrated here. Thence Alexander marched back to Tarsos by way of Megarsos and Mallos, also Greek cities, where sacrifices were offered to Athene and Amphilochos. Towards the end of the summer Alexander led his army eastward to meet the Persian king in person who was known to have been collecting an army in Syria. Along the highroad from Tarsos to Issos and thence through the famous Gates, which in ancient times marked the boundary between Cilicia and Syria, towards the busy port of Myriandros marched the Greek army. Meanwhile Darius had crossed the Amanus mountain and placed himself in the plain of Issos squarely in Alexander's rear.

[1] Xenophon, "Anabasis," I, ii, 22.

Hastily the latter retraced his steps, met the Persians in the plain of Issos, and routed them completely. Thus, at a single stroke, was settled the ownership of Cilicia, Syria and Phoenicia. From that day onward the tide of Macedonian victory rolled eastward and Cilicia, under its newly appointed governor, Balakros son of Nikanor, formed an important and integral part of the Macedonian Empire. So important indeed did the firm consolidation of the province appear to Alexander that at first and contrary to his usual custom, he combined in the person of the one man — the aforementioned Balakros — the civil office of satrap and the military office of general commanding the provincial garrison.[2]

That this strategic and vitally important province was well consolidated and strongly garrisoned we may be certain. We know that in 328 B. C. Balakros himself perished during the course of a border war which he was carrying on against certain mountain tribes to the north and west who, from their fastnesses in the Taurus range, might prove a menace to the security of the province. Knowing from this that an active army was actually maintained in Cilicia we may securely conjecture that, as under previous Persian satraps who had used this district as a convenient base for their military operations, the mints here located continued to coin money under Alexander. This surmise is proved correct by the existence of a large number of this monarch's coins whose style is identical to the satrapal and military coins previously issued here by the Persians. L. Müller in his "Numismatique d'Alexandre le Grand," page 277 ff. has already made this observation and correctly assigns a large number of Alexander's coins to Cilicia. He made little headway, however, in dividing these issues among their respective mints, as the majority of his local attributions can be disproved.[3]

In the fourth century B. C., under Persian domination, Tarsos became the leading mint for the money struck by satrapal or military author-

[2] Arrian II, 12 says that Alexander appointed Balakros 'satrap.' It was not until in 330 B.C. that a certain Menes was sent from Babylon to act as 'hyparch' or general of the troops stationed in Cilicia, Syria and Phoenicia.

[3] His nos. 1287 and 1288 should be given to Salamis in Cyprus and nos. 1294 to 1297 inclusive to Kition in Cyprus, as shown by the present writer in Num. Chron., Vol. XV, 1915. It may be added that nos. 1304, 1305, 1317, 1318 should be assigned to Babylon (see Imhoof-Blumer in Num. Zeitschr., 1895); 1306 to Miletus; 1312, 1319, 1320, 1321 to Sidon (see "The Dated Alexander Coinage of Sidon and Ake" by the present writer). Furthermore nos. 1303, 1309-11, 1313-15, 1322-29, 1330, 1336 by their style belong to mints outside of Cilicia. The remainder are really Cilician.

ity. Because of this precedent, because of the fact that Tarsos was the capital and the natural seat of the new authority, and, lastly, because of her central position and because she was conveniently situated near to the silver mines of the Taurus mountains,[4] we have every reason to suppose that under Alexander she continued to issue money, but henceforth with the types of the new ruler. In a previous work the writer has already drawn attention to the fact that a great many of the mints which had coined under the last of the Persian kings continued to do so under Alexander. To mention but a few in this portion of his empire, there were Arados, Byblos, Sidon, Salamis and Kition. Tarsos was certainly another.

Before proceeding to the Alexandrine issues of Tarsos it would be well to take a hasty survey of the satrapal coinages which were their immediate predecessors. First Tiribazos between the years 386 and 381 B. C., and later Pharnabazos and Datames in 379-372 B. C. struck large quantities of coin, bearing their several names and types, to defray the expenses of the military operations they were engaged in. In 361 B. C. Mazaios was appointed governor for Cilicia. In 351 B. C. came the great revolt against the Persian king of certain of the princes of Cyprus and Phoenicia. Hidrieos, satrap of Caria, was charged with the reduction of the former, while Mazaios with Belesys, satrap of Syria, undertook the suppression of the Phoenician rebels. To meet the expenses of these operations Mazaios caused to be struck in his name at Tarsos large numbers of Persian silver staters having on the obverse the seated figure of Baal-Tars, and on the reverse a lion attacking a stag (Plate I, nos. 1, 2, 3). The next series is even more distinctive of Tarsos. While the obverse remains the same except that the head of Baal-Tars is facing, the reverse gives a spirited representation of a lion

[4] That there were comparatively rich silver mines in the Taurus range we may infer from the heavy coinage in this metal issued by the satraps and autonomous cities, from the fact that the principal portion of Cilicia's tribute to the king of Persia was annually five hundred talents of *silver* (Her. III, 90), and from the traces of ancient silver mines found there to-day. In speaking of Bulghar-Maden, situated just northwest of the Cilician Gates in the Taurus Mountains, Mr. Garstang says: "The silver mines to which the place owes its name and probably its being, seem to have been considerably worked in ancient times." (Garstang, "Land of the Hittites," page 43). W. B. Barker, in his "Lares and Penates, or Cilicia and its Governors," page 125, says: "Near Kulak Bughaz (the Cilician passes) there are lead mines .... It has lately been discovered by an Italian mineralogist, M. Boriani, that together with this lead there is a good deal of silver .... Towards Sis (ancient Pendenissus) there are also mines of great value ...." To this the following note has been added by W. F. Ainsworth, F. R. G. S., F. R. S.: "At the time that the Euphrates Expedition was at Suwaidiyah, an Englishman arrived, who had been invited to the country by Ibrahim Pasha to work the mines of argentiferous galena, near Sis."

attacking a bull (Plate I, 4) — the characteristic emblem of the city of Tarsos and found on her coins as late as the reign of Gordian III. At some date after 351 B. C. Mazaios also became satrap of Syria, though still retaining his former dignity in Cilicia. Under these circumstances he caused to be struck at Tarsos the well known staters with the lion and bull emblem depicted over a double row of towered and battlemented walls, and with the long and interesting inscription מזדי זי על עברנהרא וחלך "Mazaios who is over Abernahra and Cilicia" (Plate I, 5). Abernahra is the Aramaic name for the trans-Euphratine district now known as northern Syria. Such are the satrapal issues of Cilicia from the Tarsiote mint which may be looked upon as the direct progenitors of the new coinages issued here, from the Summer of 333 B. C. on, in the name of Alexander the Great.

SERIES I, 333 to circa 327 B. C.

Silver issues with name: ΑΛΕΞΑΝΔΡΟΥ.

TETRADRACHM.

Head of youthful Herakles to r., covered with lion's skin. Circle of dots.

ΑΛΕΞΑΝΔΡΟΥ on r. Zeus, naked to waist, legs parallel and feet resting on stool, seated to l. He holds eagle in outstretched r. and sceptre, adorned with lotos bud, in l. Circle of dots.

BRONZE.

Similar to preceding.

ΑΛΕΞΑΝΔΡΟΥ between club and bow in quiver. Circle of dots.

FIRST GROUP.

"Officina" A.

1 (Müller no. 1293a) Beneath throne: Pellet.

Obverse die.	Reverse die.	
I	1	E. T. N., Plate I, 6 and 7.
II	1	" (two specimens).
. . . .	2	" Plate I, 8 and 9.
III	3	" Plate I, 10 and 11.
. . . .	4	" Rev. Plate I, 13.
IV	3	" Obv. Plate I, 12.
V	5	" Plate I, 14 and 15.

"Officina" B.

2 (——). No mint mark.

I	6	E. T. N., Plate I, 16.

V	. . . .	*7*	E. T. N., (two specimens) **Plate I, 17.**
VI	. . . .	*8*	" (two specimens) **Plate I, 18.**
	. . . .	*9*	" Rev. **Plate I, 19**; E. T. N.[5]
VII	. . . .	*9*	Amer. Numis. Soc., Obv. **Plate I, 19.**
	. . . .	*10*	Amer. Numis. Soc.

SECOND GROUP.

"Officina" A.

3 (Müller no. 1291). Beneath throne: A

III[6]	. . . .	*11*	E. T. N.
	. . . .	*12*	" **Plate I, 20.**
	. . . .	*13*	"
	. . . .	*14*	"
	. . . .	*15*	" E. T. N.[7]
IV[8]	. . . .	*16*	"
	. . . .	*17*	" **Plate I, 21.**
	. . . .	*18*	"
VIII	. . . .	*18*	"
	. . . .	*19*	" (two specimens).
	. . . .	*20*	"
	. . . .	*21*	" **Plate II, 1.**
	. . . .	*22*	"
	. . . .	*23*[9]	"
IX	. . . .	*20*	"
	. . . .	*23*[9]	" (two specimens).
	. . . .	*24*	Paris (no. 984).
	. . . .	*25*	E. T. N., **Plate II, 2.**
	. . . .	*26*	" (two specimens).
	. . . .	*27*[9]	"
	. . . .	*28*	"
	. . . .	*29*	"
	. . . .	*30*	"
	. . . .	*31*	"
X	. . . .	*30*	" **Plate II, 3.**
	. . . .	*32*	"
	. . . .	*33*	"

[5] The obverse die used for this coin is now in a very bad state, the reverse die is also damaged as seen by the following coin (VII-9).

[6] Die III henceforth shows evident traces of wear.

[7] On this coin die III shows new break over eye.

[8] Die IV henceforth shows traces of wear.

[9] On these dies A is engraved over B.

XI	*34*	E. T. N., Plate II, 4.	
. . . .	*31*[10]	"	
. . . .	*35*	"	
. . . .	*36*	"	
. . . .	*37*	"	another in commerce.
. . . .	*38*	"	(two specimens).
. . . .	*33*[10]	"	
. . . .	*39*	"	Plate II, 5.
. . . .	*40*	In the trade.	

"Officina" B.

4 (Müller no. 1289). Beneath throne: B

VII[11]	*41*	E. T. N.	
. . . .	*42*	"	(overstruck) Plate II, 6.
. . . .	*43*	"	
. . . .	*44*	"	
IX	*45*	"	(overstruck). Plate II, 7.
XII	*45*	Egger Sale, May, 1912, no. 667.	
. . . .	*46*	E. T. N.	
. . . .	*47*	"	(two specimens).
. . . .	*48*	"	
. . . .	*49*	"	Plate II, 8.
XIII	*50*	"	
. . . .	*51*	"	Plate II, 9.
. . . .	*52*	"	
. . . .	*53*	"	
. . . .	*54*	"	
XIV	*49*	"	(two specimens). Plate II, 10.
. . . .	*55*	"	
. . . .	*56*	"	(two specimens).
XV	*45*	"	
. . . .	*47*	"	
. . . .	*48*	"	another in the trade.
. . . .	*49*	"	
. . . .	*50*	"	
. . . .	*56*	"	
. . . .	*58*	"	Plate II, 11. Amer. Num. Soc.
. . . .	*59*[12]	"	
. . . .	*60*	"	

[10] The coins have been placed according to the progressive wear and appearance of new fractures in the obverse die (XI).

[11] Die VII now shows distinct signs of wear.

[12] Obverse die here shows least signs of wear.

XV . . . . *61* E. T. N., (two specimens).
. . . . *62*[13] "
. . . . *63*[12] "
XVI . . . . *61* " Plate II, 12.
. . . . *63* "
. . . . *64* "
. . . . *65* "
XVII . . . . *66* "
. . . . *67* " Plate II, 13.
XVIII . . . . *67* " (two specimens). Plate II, 14.
. . . . *68* "
. . . . *69* "
XIX . . . . *70* "
. . . . *71* " Plate II, 15.
. . . . *72* "
XX . . . . *68* L. V. Case.
. . . . *73* E. T. N.
. . . . *74* Egger Sale, May, 1912, no. 667, Plate II, 16.

THIRD GROUP.

"Officina" A.

5 (Num. Zeitschr., vol. I, 1869, p. 38, no. 78).
In field: Ornamented Trident. Beneath throne: $\overset{\cdot\cdot}{\text{A}}$
XI[14] . . . . *75* Berlin.
. . . . *76* R. Storrs; E. T. N.
. . . . *77* London, Plate II, 17; E. T. N.

6 (Müller, no. 1293). Beneath throne: $\overset{\cdot\cdot}{\text{A}}$
XXI . . . . *78* (Trident erased), E. T. N. (two specimens), Plate III, 1.
. . . . *79* E. T. N.
XXII . . . . *80* "
. . . . *81* " Plate III, 2; L. V. Case.
. . . . *82* " Oxford (Ashmolean).
. . . . *83* "
XXIII . . . . *83* " Plate III, 3.
XXIV . . . . *84* " Plate III, 4.

7 (——). Beneath throne: $\overset{\cdot\cdot}{\text{A}}$ Between throne and sceptre: Pellet.
XXII . . . . *85* E. T. N., Plate III, 5.

[13] On this die B is engraved over A.
[14] Die XI now shows evident signs of wear.

8 (Müller, no. 1292). Beneath throne: Ȧ

XXIV	*86*	E. T. N. (two specimens).
	87	"
	88	" Plate III, 6.
	89	"
XXV	*90*	" Plate III, 7.
	91	"
	92	"
	93	Amer. Num. Soc.

9 (——). Beneath throne: A Pellet between throne and sceptre.

XXVI	*94*	E. T. N.
	95	"
	96	"
	97	"
	98	"
	99	" two specimens).
	100	" (two specimens), Plate III, 8.
	101	"

"Officina" B.

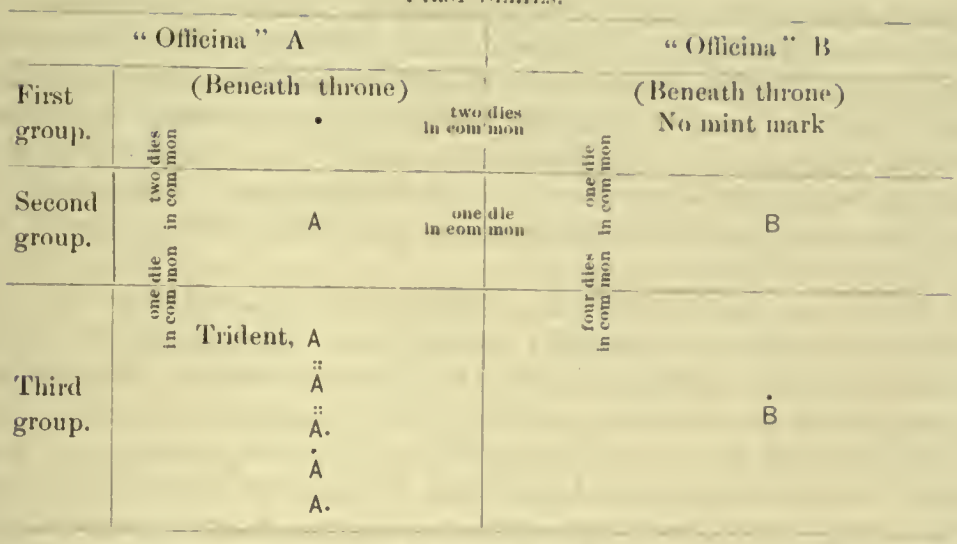
10 (——). Beneath throne: Ḃ

XVI	*102*	E. T. N., Plate III, 9 (two specimens); Oxford (Ashmolean).
XVIII	*103*	"
	104	"
	105	" Plate III, 10.
	106	"
XIX	*106*	Egger Sale, May, 1912, no. 667.
	107	E. T. N., Plate III, 11; F. M. Endicott; another in the trade.
	108	"
	109	"
XX	*108*	" Plate III, 12.
	110	"
	111	"
	112	" (two specimens).
XXVII	*109*	"
	112	"
	113	"
	114	" Plate III, 13.
	115	"

BRONZE UNIT.

11 (——). E. T. N.

DIAGRAM
FIRST SERIES.



The relations existing between obverse and reverse dies of this series have been minutely indicated in the preceding catalogue because only thus are we enabled to draw certain interesting and important conclusions. In the first place, we are forced to the conclusion that the ten varieties of tetradrachms here treated are not consecutive issues. Rather must they be divided into two groups, which, for convenience sake and following a custom known to have existed in Roman times, may be designated as the issues of two officinae, A and B, of a single mint. These two groups are strictly contemporaries of each other as proved by the use in common of certain obverse dies, and by a generally similar progression of style and technique displayed by their respective obverses and reverses. With the exception of the first group of each officina, the coins of 'A' are all marked with an A, the coins of 'B' with a B.[15] In addition, pellets singly or in groups and placed in various positions on the reverse die, serve as minor marks of control. The preceding diagram will show more clearly the mutual correspondence of the several groups that go to make up the first issue of Alexandrine tetradrachms from the royal mint at Tarsos.

[15] The writer does not feel warranted in insisting that the mint was really divided into two distinct branches and that the one was designated with an A, the other with a B, and that furthermore their coin issues were so marked. Rather would I see in the letters A and B the initials of the chief magistrates, each of whom assumed the responsibility for one half of the output of coin. The two groups, the one with A, the other with B, are sufficiently distinct, however, to make it advisable, for purposes of study, to assume that the coins were issued by two more or less independent branches of the one mint.

For the first group of officina A five obverse dies (I, II, III, IV, V) were cut, but, so far, only five reverse dies are known to have been used with them. Similarly for the first group of officina B four obverse dies are known (I, V, VI, VII) of which the first and second were also used in officina A. This fact, together with the close similarity of style and technique displayed on the obverses and reverses of both groups, proves their contemporaneousness as well as their origin in a single mint. It is to be noticed that the Zeus figure on these coins has no locks of hair on the nape of his neck.

The second group of officina A follows immediately upon the first, of which it continues to use two obverse dies (III and IV) now showing unmistakable evidences of wear (compare on Plate I, obverses nos. 10 and 12 with obverses of nos. 20 and 21). In addition to obverse dies III and IV, four new ones (VIII to XI) are cut and put into use. Similarly for the second group of officina B we find one of the obverse dies (VII) of the first group still in use, but also showing signs of wear (compare Plate I, no. 19 and Plate II, no. 6). Nine new obverse dies (XII to XX) are cut and put into operation together with an obverse die (IX) of officina A. Thus variety 3 (of A) is contemporary with no. 4 (of B) as shown by the interchange of this die (IX), by the recutting of an A over the B on reverse dies *23* and *27*, the corresponding recutting of a B over the A on die *62*, and by the close similarity in the style and appearance of the coins themselves. This can be seen by comparing the following two cuts.



Variety 3 of officina A.

Fig. 1

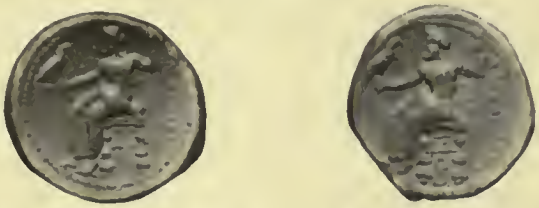


Variety 4 of officina B.

Although it seems to have been necessary to cut more obverse dies for this B group than for the corresponding A group, the number of reverse dies used remains about the same. Because of this and because the artistic and stylistic progression of the obverse and reverse dies is identical we may infer that the second groups of A and B, appearing simultaneously, endured the same length of time and were about equal in the size of their respective coin issues.

In both officinae the second group is followed by a third group of slightly later style but bound to the former by the continued use of

certain obverse dies. In A one obverse die (XI) is carried over to the new group; in B as many as four (XVI, XVIII, XIX and XX) obverse dies continue to be used. We have above recorded the fact that six more obverse dies had been cut for the second group of B than for the corresponding group of A. As the size and duration of time of the two issues seem to have remained the same, the natural result was that the wear and tear on the obverse dies of B would have been less in the aggregate, and more could have therefore been preserved for continued use in the third group than was the case for the third group of A. In fact the only die that survived (XI) for continued use in the third group of A plainly shows the effect (see Plate II, no. 17) of long and hard usage. Whereas the first two groups of A exactly parallel in style, size of output, and number of varieties, the first two groups of B, the present or third group diverges from that of B in every one one of these respects. Because, however, in both officinae certain obverse dies serve to definitely bind the third and second groups and because certain reverse dies of the third A group are absolutely identical in style with reverse dies of the third B group (compare the accompanying cut) we possess



Reverse no. 86, third group, officina A. Reverse no. 112, third group, officina B.

Fig. 2

the proof that we are still dealing with the issues of a single mint. As shown by their, for the Tarsiote mint, unusual style there appeared at this time in officina A an extra issue of tetradrachms not duplicated in B. These coins are of an individual style resembling only in a general way that of the regular issues of A and B, the flans are usually somewhat smaller, the striking more careless, the work less good artistically. In fact, their style differs so much in details from the normal issues of officinae A and B that the writer was at first[16] under the impression that they must have been struck at some other mint. Furthermore, die XXII bears such close resemblance to a certain die used at the Phoenician mint of Ake[17] that it is difficult to believe they were not both cut by the same hand. In spite of this it is no less than certain

[16] American Journal of Numismatics, Vol. XLVI, 1912, p. 45.

[17] E. T. Newell, "The Dated Alexander Coinage of Sidon and Ake," Plate V, 14.

that our varieties 5, 6, 7, 8 and 9 belong to the same series and mint as varieties 1 and 3. In the first place no. 5 (with symbol Trident in field and A beneath throne) is definitely bound with no. 3 by the use in common of an obverse die (XI). The very first reverse die (*78*) of variety 6 shows that the Trident symbol of no. 5 was once engraved in its field, but was later erased leaving, however, distinct traces (Plate III, 1). Thus, in addition to the A which appears on both, the traces of the characteristic Trident symbol proves that we can not separate no. 6 from no. 5. Varieties 7 and 8 are bound by the common use of dies XXII and XXIV to no. 6 and we therefore must admit that this entire group, composed of varieties nos. 3, 5, 6, 7 and 8 form a single and indivisible unit and so must have been struck in one and the same mint. Variety 9 is but a slight variant of no. 8 and so certainly belongs with it, as the style shows. In carefully considering the above facts we are brought to the conclusion that, at some time not long after the mint at Tarsos had commenced to coin for Alexander, the old staff of die-cutters, as taken over from the Persian régime, was found to be inadequate to handle the great mass of coin which had now to be issued under the changed conditions obtaining in the province of Cilicia. Not only was the issue of the Alexander tetradrachms larger, as a whole, than any one of the preceding satrapal issues, but, as we shall soon see, other series' of coins were now being struck as well, thus materially increasing the general output of coin from our mint. It is reasonable to suppose, then, that one or more new die cutters had to be secured to assist in the enlarged production. These new die cutters seem to have been assigned only to officina A — the old ones continued to be employed in officina B. One of the new engravers (he who cut obverse die XXII and reverse dies *79* to *85*) seems to have been imported from Ake in Phoenicia where he had been working for a couple of years after leaving Sidon.

As brought out by the present writer in his monograph on "The Dated Alexander Coinage of Sidon and Ake," p. 53, this die cutter had already been transferred, sometime in the year 332 B. C., from Sidon to Ake when a mint was opened in the latter city during Alexander's operations against Tyre and later against Gaza. From this artist's hands are obverse dies II, III, IV, V, VI, of Ake as well as practically all the reverse dies of varieties 1, 2, 3 and 4 (compare *loc. cit.* Plate V, nos. 9 to 15) of that mint. Almost exactly similar in style and technique (see the following cut) are obverse die XXII and reverse dies *79* to *85* of the Tarsos mint.



New artist at Tarsos. The same artist at Ake.

Fig. 3

In the above mentioned monograph the writer (on pages 53 and 54) indicated that the four Ake varieties which contain the dies cut by this particular workman cover only the years 332 to 330 B. C., after this date his work is no longer seen at Ake. Therefore it is to be inferred that he left Ake sometime between 330 and 329 B. C. Now it is about this very time that his style suddenly appears in the Tarsos mint. For in officina A we possess nine (I-V, VIII-XI) obverse dies to cover the years 333 to 330/29 before his handiwork appears. Similarly, for Sidon we possess eleven obverse tetradrachm dies to cover the period from late in 333 to October 327 B. C; for Ake we possess six obverse tetradrachm dies to cover the period 332 to 329 B. C., or, in each case, about two obverse dies per year. Basing our estimates on this evidence, die XI of officina A of Tarsos would bring us to 329-328 B. C., at the latest, for the first appearance in this mint of the new artist. In other words all internal evidence available would seem to tally with our supposition that a certain die cutter was transferred from the Ake mint to Tarsos to assist in an increased output of coin in that mint, and that this event occurred about the year 329 B. C. It would not perhaps be too far fetched to assume that this exceptional activity in the Tarsos mint was directly due to the preparations for the expedition undertaken in 328 B. C. by Balakros, the satrap of Cilicia, against the warlike and formidable mountain tribes of the Isaurians. It was in this campaign that Balakros was defeated and lost his life.

Briefly then, in following the issues of the two branches or, to use a Roman expression, officinae of our mint at Tarsos, we have noticed that they commenced operations respectively with three and two obverse dies each, and, in addition, two used in common. The style of the dies, both obverse and reverse, cut for the two officinae are identical. A second group of coins now followed in each officina, bound to the previous ones and to each other by the use in common of certain obverse dies, but henceforth differentiated by the letters A and B placed on their respective reverses. The style has become slightly modified,

but only in such minor details as, for instance, the appearance of locks of hair falling down over the nape of Zeus' neck. The second group of A must be contemporaneous with the second group of B as two of its reverse dies show an A engraved over a B, while, reciprocally B uses an obverse die of A. In each officina the second group then merges into the third group and with the continued use of certain old obverse dies. Now, however, the new artists who have been introduced into officina A so influenced the style of its issues that in many details this style differs radically from that found on the contemporary issues of B. It is never-the-less certain that the third group of A and the third group of B are more or less contemporaneous because these two groups, as we have already seen, must have both commenced about the same time; because a few of their dies closely resemble each other in style; and because an identical mark of control — a pellet — is found over the characteristic letter on all the reverse dies of B and many of those of A.

In approaching the question of the percentage of obverse to reverse dies as shown by the coins of Series I, it must be remembered that this study has had to be based almost entirely upon such coins as chanced to be in collections on this side of the Atlantic. If casts could have been secured from the principal public and private collections of Europe many more reverse dies would assuredly have been found. As it is, Series I furnishes us with an average of over four reverse dies to every obverse one.[18] In individual cases, however, we have up to ten and twelve reverses for one obverse. For the present we have, in Series I of the Tarsiote mint:

2	instances	of	12	reverse	dies	used	with	one	obverse	die.
1	instance	of	11	"	"	"	"	"	"	"
1	"	of	8	"	"	"	"	"	"	"
4	instances	of	7	"	"	"	"	"	"	"
2	"	of	6	"	"	"	"	"	"	"
6	"	of	5	"	"	"	"	"	"	"
2	"	of	4	"	"	"	"	"	"	"
2	"	of	3	"	"	"	"	"	"	"
6	"	of	2	"	"	"	"	"	"	"
1	instance	of	1	"	"	"	"	"	"	"

It would not be placing the figure too high to consider the original average proportion of reverse dies to obverse dies for tetradrachms to have been not less than eight to one, and probably more than ten to one. This is shown by statistics we have available in the contemporary mints of Sidon and Ake.[19] For Sidon we have one case where

[18] To be exact, we have 115 reverse dies used with 27 obverse dies.

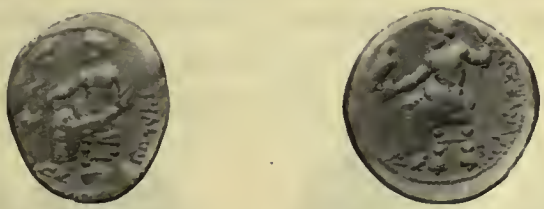
[19] See "Dated Alexander Coinage of Sidon and Ake," *passim*.

seven reverse dies were used with one obverse. For Ake we have the following proportions:

1 instance	of	13	reverse	dies	used	with	one	obverse	die.
1 "	of	12	"	"	"	"	"	"	"
1 "	of	11	"	"	"	"	"	"	"
2 instances	of	10	"	"	"	"	"	"	"
2 "	of	9	"	"	"	"	"	"	"
3 "	of	8	"	"	"	"	"	"	"
3 "	of	7	"	"	"	"	"	"	"

and many in addition with anywhere from one to six to a single obverse. These last low proportions, as suggested in the above mentioned monograph, pages 67 and 68, are probably due more to the chances of time than to the small number of reverse dies actually cut in proportion to obverse dies.

Throughout Series I the dies were not fixed. In this our Alexander tetradrachms but follow the preceding satrapal issues. It is interesting to note in how many instances[20] the customs and peculiarities of a local coinage will reappear on the succeeding issues of Alexander for the same district. This shows clearly how the personnel, appliances and traditions of a mint were all retained for the production of the new coin. The coinage of Tarsos is no exception to this rule and the issues bearing the name and types of Alexander the Great are seen to be the direct successors of the local coins of the Persian satraps. The accompanying cut (fig. 4) places side by side a Mazaios stater and a tetradrachm of Alexander's first issue at Tarsos. We may now note the



Mazaios Stater. Alexander Tetradrachm.

Fig. 4

identical form of the throne, the sceptre, the foot-stool, and other details on both. The drapery is rendered in a similar manner, the Aramaic inscription of one and the Greek inscription of the other are similarly curved, following the dotted border of each. There can indeed be little doubt that the two series of coins were the common product of a single mint.

[20] Among others, the Alexander issues of Salamis, and Kition in Cyprus, Byblos, Sidon and Ake in Phoenicia.

ISSUE OF PERSIC STATERS, Circa 327 B. C.

Immediately succeeding the series of Alexander tetradrachms which we have just been studying, there was issued a special series of Persic silver staters. These in many ways are remarkable and stand out in strong contrast to the Alexandrine issues. The latter, in character and circumstance, were really the direct descendants of the earlier issues of Tarsos which bear the names of Persian satraps, such as Tiribazos, Pharnabazos, Datames and Mazaios. For the Alexandrine issues were a military as well as an imperial undertaking. They were issued to pay the troops stationed in Cilicia for the protection of the province and the securing of the important and now vital highway which traversed it. They proclaimed the name of the new master and so brought before the people the fact that Cilicia was now an integral portion of his empire. They were struck to conform the circulating medium of this province with the currency of the remainder of the empire and so to encourage and facilitate a more widely spread commerce and exchange. On the other hand, the new issue of Persic staters, while resembling the earlier satrapal issues in weight and, to a certain extent, in type, was a purely municipal and local undertaking. Unlike the contemporary Alexander tetradrachms or the earlier satrapal staters no name of overlord or of military authority appears upon them. Instead, the four letters T, M, ≷, I, which occur singly beneath the Baal throne, clearly indicate that it was the municipalities of Tarsos, Mallos, Soloi and Issos, the four largest and most important cities of Eastern Cilicia, that were alone responsible for this recoinage of the Persic stater.

SERIES I.

First group, Circa 327 B. C.



Fig. 5

בעלתרז on l. Baal-Tars, himation over l. arm and legs, seated to l. and rests r. arm on lotos-headed sceptre. In field to l., ear of wheat. Border of dots.

a. Beneath throne, T.

Paris (Babelon, Traité II², no. 713 Pl. cxiii, 10), fig. 5; Newell Coll.



Fig. 6

Two lines of wall, one above the other. Above, lion to l. attacking bull to r.; above, Club. Border of dots.

b. Beneath throne, M.
London (B. M. Catalogue, no. 66).
c. Beneath throne, I.
London (B. M. Catalogue, no. 65, Pl. xxxi, 7), fig. 6.

Second group (with B)



(Enlarged)
Fig. 7

d. Beneath throne, ≷. Above lion on reverse, B.
Coll. Six (see Babelon, Traité II², no. 716).
e. Beneath throne (?), usually plain. Above lion on reverse, B.
Paris (Babelon, Traité II², no. 712, Pl. cxiii, 9); Benson Sale, Sotheby 1909, no. 746, fig. 7; Newell Coll.

PERSIC OBOL.

Head of Athene to r. in crested Attic helmet. Circle of dots. Shield of so-called Boeotian shape. Circle of dots.

f. To right of shield, B.
Paris (Babelon, Traité II³, no. 374, Pl. ccix, 38).

Unlike the previous staters struck in the name of Mazaios and the first series of tetradrachms issued by Alexander at Tarsos, the present staters do not show a foot-stool beneath the feet of Baal-Tars. In this peculiarity they are exactly paralleled by the first issues of the Alexander tetradrachms of Series II, as the accompanying cuts can best show.



Reverse of Alexander Tetradrachm



Persic Stater. (Enlarged)
Fig. 8



Reverse of Alexander Tetradrachm



Persic Stater. (Enlarged)
Fig. 9

The absolute identity in style and workmanship between the Baal figure of these coins and the Zeus of the Alexander tetradrachms to be

described at the commencement of Series II (p. 97) proves both that the dies were probably cut by the same artists and that the coins were issued simultaneously from one and the same mint. On the tetradrachms the attitude of Zeus corresponds to the type as already introduced on Alexander's coinage shortly after his accession to the Macedonian throne. Here the outstretched right hand holds the eagle, the left rests upon the lotos-tipped sceptre. On the Persic staters the figure of Baal-Tars, as far as clothing, position of body and legs, and details of hair and wreath are concerned, is identical to the tetradrachms, the extended right hand, however, grasps the sceptre while the left rests upon his hip. The structural details of the throne on both categories of coin are also absolutely identical. As stated above, the four letters T, M, ≷ and I found on the obverse of these staters can only mean that the coins were issued under the auspices and at the joint expense of the four cities of Tarsos, Mallos, Soloi and Issos. The actual *striking*, however, took place in the imperial mint at Tarsos. This is shown not only by the style and technique of the coins themselves, but also by the club of Tarsiote Herakles on the reverse, and by the letter B which is so characteristic of the Alexander issues of both Series I and II. Thus we see that not only were these staters struck at Tarsos after the conquest of Cilicia by Alexander but that it was the "B" official of that mint who supervised their manufacture for the four municipalities of Tarsos, Mallos, Soloi and Issos. This would also dispose of the various attempts to see in the B the initial letter of Βασιλέως,[21] Βελέσυς,[22] or Βάλακρος.[23] Furthermore, now that we possess valid reasons for assigning this series of Persic staters to a period subsequent to Alexander's arrival in Cilicia, we are in a position to answer a question raised by Six (Num. Chron., 3rd Series, vol. IV, 1884, page 138), who calls attention to the fact that on these pieces the marks of control are in *Greek*, whereas on the earlier coins (which bear the name of Mazaios) they are in Aramaic. When the old mint at Tarsos became a royal mint of Alexander's empire the responsible officials, whose duty it was to sign the coinage, were now either Greeks themselves or were henceforth required to employ Greek letters in their signatures. For this was now a central mint of the empire and its coinage of Alexandrine types was expected to circulate throughout the Greek world.

[21] Babelon, Traité II, p. 464.

[22] Catalogue of the Greek Coins in the B. M. Lycaonia, Isauria, Cilicia, 1900, introd. lxxxiv. note 1.

[23] Babelon, Les Perses Achéménides, etc. Paris, 1893, p. xlvi.

Emphasis has here been purposely laid on the character of the mint at Tarsos in order to bring out the difference that existed between it and the mints of such city-states as Arados, Byblos, Sidon and Ake. In these the coinage, though conforming in weight, types, and denominations with the remainder of the empire, still was allowed to retain something of its local character. Thus the mint marks on their "Alexanders" are often in native characters. On the first issues of Arados and Byblos we find 𐤀 and 𐤏 respectively; on those of Sidon 𐤑 with 𐤀 or 𐤁 and later also 𐤆, 𐤇, 𐤈, and 𐤉; on those of Ake the name of the city and dates are in Phoenician letters. It is also to be observed that at Ake, during the period of the sieges of Tyre and Gaza when the city served as a base for the Greek army, the tetradrachms bore Greek symbols and letters,[24] but so soon as Alexander departed for the East and the mint was presumably turned over to the local authorities, Phoenician letters appear. Similarly, the first issue of gold staters at Sidon was probably associated with the use of that city as an important military base.[25] These staters at first all bear various symbols as mint marks,[26] but later their place is taken by Phoenician alphabetical dates when the city, as such, acquired the right to coin gold as well as silver. Thus, by comparing them with the earliest Alexander issues of the Phoenician city-states, we can see that the Tarsiote issues are entirely imperial in character. With the exception of style, they bear no distinctively local marks. In strong contrast to this are the Persic staters described above. These, although evidently struck in the same mint, at the same time, and guaranteed by the same high official (B) as the Alexander tetradrachms, never-the-less reveal their local character by their types, by the absence of the name of any satrap or king, by the presence of the club of Herakles of Tarsos, and, finally, by the four initial letters T, M, Σ and I.

After having pointed out the true date and character of these Persic staters, it will be necessary to consider the reasons for the reappearance of a coin which one might have supposed would have been definitely done away with on the collapse of Persian dominion west of the Euphrates, and the consequent establishment of a new order of

[24] "Dated Alexander Coinage of Sidon and Ake," varieties 1–4 of Ake.

[25] *Idem.*, pp. 22, 23 and 26.

[26] *Idem.*, Varieties 1–7 of Sidon. Between these and the staters with the alphabetical dates come several staters with the symbols Filleted Laurel Branch or Galley. These symbols are of purely local significance and, because of the accompanying ΣI, prove the coins were issued under local authority.

things. In the first place it must be remembered that customs and prejudices are not thus lightly changed in the East. That this truism was recognized and respected by Alexander himself history clearly shows. The same spirit is shown in his coinage. In many of his eastern mints due consideration of local conditions seems to have been taken. In other words his types and the Attic standard, while forming the bulk of the coinage and the official medium of exchange, were not absolutely and drastically enforced to the exclusion of all else. Thus for Cyprus, while large quantities of Alexander staters, tetradrachms, drachms, and bronze pieces were coined in all the island mints, still, at the same time, small denominations of Rhodian weight and bearing local types were allowed to be issued.[27] In Arados and Byblos small denominations with local types were struck along with the regular Alexander issues.[28] At Hierapolis in Syria were coined didrachms of Attic weight and in the name of Alexander or of the High Priest Abd-Hadad, but all bearing local types.[29] Throughout the last quarter of the Fourth Century B. C. double daries with the old Persian types were also issued at Babylon, along with the gold staters and silver tetradrachms of the regular Alexander type. These and many other instances of the same sort give us sufficient reason not to be surprised to find that after the conquest of Cilicia by Alexander he should still countenance the coining of Persic staters in his mint at Tarsos. In Cilicia the Attic standard was well known and accepted. All the coins struck here, however, and the bulk of the circulating medium before the arrival of Alexander was composed of Persic staters and sigloi. Not only was it the Persian standard that had for centuries been employed by the Cilician cities of Kelenderis, Holmi, Nagidos, Soloi, Mallos, Tarsos, Issos and by the satraps Tiribazos, Pharnabazos, Datames and Mazaios, but the principal cities and districts with whom the Cilicians traded had been accustomed to employ the same standard for their issues. Among these were the important commercial cities of Selge, Aspendos, Side, and Arados, as well as the Island of Cyprus. The merchants and traders of Cilicia had also important commercial connections with the interior of Asia Minor. This is shown by the use of the Persic standard for the issues of Ariarathes I king of Cappadocia, and by the great find, made near Caesarea in Cappadocia in 1850, which was entirely

[27] Num. Chron., 4th Series, vol. XV, 1915, "Some Cypriote Alexanders," *passim*.

[28] Jour. Inter. de Num. et d'Arch., Vol. III, 1900, p. 150, and Vol. IV, 1901, pp. 41, 42; Cat. of Greek Coins in the B. M., "Phoenicia."

[29] Num. Chron., New Series, vol. XVIII, pp. 103–131.

composed of Cilician and Aspendian staters. While it was undoubtedly to the imperial interest for Alexander to have had coined only his own type of money at Tarsos, in order to conform the circulating medium of the province with that of the remainder of his empire, still this could only be done gradually and in the meanwhile he could not absolutely overlook local interests. It seems evident, therefore, that permission was at this time granted to certain commercial centres of importance to have coined, at their own expense and in the central mint in Tarsos, a series of coins conforming to the old standard and type by which so much of their trade in the past had been carried on.

It was the last issue in Cilicia of the satrap Mazaios which evidently served as the model for the new coins (compare Plate 1, 5). Perhaps these types were chosen, in addition to the obvious commercial reasons, because of their peculiar appropriateness to the issuing mint. On the obverse is enthroned the chief divinity of Tarsos—Baal-Tars as the Aramaic legend definitely states. On the reverse the emblem of the city itself — the lion attacking a bull — is depicted over the city walls. The presence of the club but confirms what the types suggest.

The joint action of the four municipalities of Tarsos, Mallos, Soloi and Issos in causing to be struck a quasi-autonomous issue raises an interesting point. In studying the fourth century coinages of eastern Cilicia it would seem as if towards the middle of that century, or even a little earlier, the Persians suppressed all autonomous coinages of three of these cities in favor of the satrapal issues. At least, the style of such pieces as have survived would seem to suggest that only Soloi was permitted to issue autonomous coins down to the arrival of Alexander. It will also be remembered that of all the Cilician cities it was only Soloi that seems to have shown any marked hostility towards Alexander and for this reason was fined two hundred talents and had a Macedonian garrison placed within its walls.[30] Was it that the Solians, having been specially favored by the Persians under their usual custom of "*divide et impera*," feared they were about to lose some of their special privileges under the new régime? If so, they only succeeded in causing their fear to come true for they were reduced to equality with their sister cities of Mallos and Issos and, among other things were deprived of their right to issue true autonomous coins. They do not seem even to have struck coins of the Alexander type, at least until

[30] Arrian II, 5.

after the death of the Macedonian. This is in strong contrast with the cities of Cyprus and Phoenicia.

GOLD ALEXANDER STATERS.

SERIES I, circa 333–327 B. C.

Head of Athene to r. in crested and serpent adorned Corinthian helmet. She wears necklace of pearls and her hair, in corkscrew curls, falls loosely about her head.

ΑΛΕΞΑΝΔΡΟΥ in straight line on l. Winged Nike on basis, seen from the front, turns head to l., holds wreath in outstretched r. and stylis of peculiar form in l.

FIRST GROUP.

12 (var. Müller, no. 193). In left field: KANTHAROS.
Obverse die. Reverse die.
A . . . . *a* E. T. N., Plate III, 14.
B . . . . *β* Petrograd (no. 198).

13 (var. Müller, no. 105). In left field: TRIDENT (downwards).
C . . . . *γ* E. T. N.; Petrograd.

SECOND GROUP.

Similar head, but hair now represented by short curly locks tight to head.

Winged Nike on basis as above holds stylis of same form as preceding. Inscription in more or less curved line.

14 (var. Müller, no. 193). In left field: KANTHAROS.
D . . . . *δ* London, Plate III, 16.
E . . . . *ε* E. T. N., Plate III, 15.

15 (var. Müller, no. 105). In left field: TRIDENT (downwards).
F . . . . *ϝ* Paris, Plate III, 17.
G . . . . *ζ* Alexandria, Plate III, 18.

THIRD GROUP.

Similar, but head larger, and hair a mass of curly locks.

Similar, but Nike larger and the stylis adorned at apex with a flying Nike.

16 (——). Beneath right wing: AMPHORA.[31]
H . . . . *η* Berlin; E. T. N. Plate III, 19; Paris; another in the trade.

17 (——). Beneath right wing: TRIDENT (to left).
J . . . . *θ* Vienna (no. 10430); Berlin (two specimens), Plate III, no. 20; Petrograd; another in the trade.

During its first years as a member of Alexander's empire the Tarsos mint did not confine its activities to striking silver tetradrachms for the

[31] Perhaps really intended for a Kantharos.

central government, and Persic staters for the account of the four municipalities of Tarsos, Mallos, Soloi and Issos. Gold staters of Attic weight and bearing Alexander's name and well known types were also necessary for the use of a province of such commercial and strategic importance as Cilicia at this time was.

The first series of gold Alexander staters struck at Tarsos and catalogued above, can be divided into three groups, according to the modifications which occur from time to time in their style. The entire issue seems to have been supervised by but two magistrates signing themselves Trident and Kantharos (the latter symbol in the third group is given more the form of an amphora with base). Although these same two symbols were also being used on the staters struck at this time in Macedonia, the style of the two series is so radically different that their several issues can be distinguished with ease. It is only in the first group of the Tarsos staters, a group that approaches the most closely to the Macedonian prototype, that we would find any difficulty at all in making the distinction. Even here this difficulty vanishes at once so soon as a visual comparison can be made, as can be seen by the following cuts. A mere glance will suffice to show that the drawing and



Fig. 10



Fig. 11



Macedonia



Tarsos



Macedonia

composition on the Tarsos pieces is finer, the outlines more graceful, the details more delicately indicated, and the relief lower. On the Macedonian pieces the locks of Athene hang down in stiff and clumsy curls, the figure of Nike is of stockier build and stands less gracefully. The shapes of the trident symbol also vary; on the first and second groups of the Tarsos coins the prongs are always barbed and longer than on the Macedonian pieces where the prongs of the trident are always short and graduate to a sharp point. The crossbar of the stylis borne by Nike varies on the Tarsos staters from that found on the Mace-

donian by having the projections at the tips face downwards instead of upwards. There is little need of pointing out the many and great divergencies in style and details of composition between the staters of the second and third groups of the Tarsos issues and those of Macedonia. The two series in these respects are utterly unlike.

We have seen that the series of Alexander staters now under discussion have nothing to do with the Macedonian issues, although the latter are marked with similar symbols Kantharos and Trident. It is a simple matter to prove that the two series have nothing in common and therefore were struck at different mints; but what specific grounds have we for assigning varieties 12 to 17 to Tarsos? In the first place our choice of possible mints is limited to the northeastern corner of the Mediterranean by the very style and details of composition which we have found so divergent from those on the staters of Macedonian origin. The accompanying cut will serve to show the great similarity



Tarsiote Stater Cypriote Stater

Fig. 12

between a stater of our first group and a contemporary stater which the writer has elsewhere[32] shown was struck at Salamis in Cyprus. In every essential detail the Cypriote piece is a copy. Note, for instance, the arrangement of Athene's locks — in contrast to the Macedonian series; note also the similarity in pose and details of the Nike figure. On both, the cross piece of the stylis has the turned down end projections, a characteristic peculiarity only found on the staters of Cyprus and those now under discussion. Again compare the reverse of variety 16 with the following cut which is the reverse of a stater from Kition



Fig. 13

[32] "Some Cypriote 'Alexanders'," Num. Chron., 4th Series, vol. XV, 1915.

in Cyprus. Aside from the general similarity in appearance, notice the same unusual position for the symbol or monogram, the same curious way Nike has her hair done high upon her head. Again, the style of the Athene head on nos. 16 and 17 is directly copied on a certain stater of this period which belongs to Arados (see cut no. 14). If the pecu-



Fig. 14

liarities of style place our staters in the northeastern corner of the Mediterranean, the staters of Series II prove that it is the Tarsos mint which issued them. These will be treated under the next section; suffice it here therefore to call attention to the fact that the same die cutter produced their obverses, as will be seen by comparing Plate III, nos. 19 and 20 with nos. 21 and 22 on the same Plate. In addition to technical reasons we also have the law of probabilities — because of the elimination of all other possible localities — to confirm our decision that it could only have been at Tarsos where our particular staters could have been struck. In the first place it must be remembered that Tarsos was undoubtedly the most important city, from a governmental standpoint at least, between Sardis in the west and Babylon in the East. As under the Persian Empire, so now, Sardis remained the chief capital of the Asiatic lands north and west of the Taurus mountains, Babylon of all lands from Syria to the eastern confines of Persia. Tarsos, as actual capital in Persian times of Cilicia and North Syria, remained under Alexander the most important metropolis and centre of government of the entire Cilician, Syrian and Phoenician districts. As Antioch had not yet been founded, there could be no possible rival, for the flourishing city-states of Phoenicia and Cyprus were at this time more like semi-independent allies than like so many integral portions of the empire. The Alexandrine coinages of these cities bring out this point clearly. The issues of Arados, Byblos, Sidon, Ake, Damaskos, and the Cypriote cities all bear mint marks of purely local significance, showing the almost autonomous character of their coinages. The only exceptions are the earliest gold staters of Sidon, and silver tetradrachms of Ake which, perhaps, were struck by royal authority during the sieges of Tyre and Gaza. They did not need local mint marks as, presumably, the coinage was only intended for the use of

Alexander's army and so was issued under the supervision, not of local magistrates, but of royal appointees. We thus see that all the large cities of Phoenicia and Cyprus are amply provided with a gold coinage struck in their local mints. There is no important city in or near the coasts of the northeastern corner of the Mediterranean which has not a gold coinage at this time, except the four large cities of eastern Cilicia. But Mallos, Soloi and Issos now no longer possessed a mint of their own as we saw how they had to have their issues of Persic staters struck at Tarsos. Tarsos therefore remains as the only possible and logical location for our issue of Alexander staters. Particularly is this the case as, possessing only magistrate's symbols, on the analogy of the two series of Sidon and Ake mentioned above, our staters would seem to have been purely royal issues. Tarsos, being the governmental centre of all this district, would then be the natural place to which to assign them. The purpose of this issue of gold staters would be to supplant the darics of the preceding régime and to defray the expenses of the large military forces stationed in Cilicia for the protection both of the province itself and of the important highway which traversed it.

On one issue of the contemporary tetradrachms (var. 5) a trident was also used as an additional symbol. Possibly we have to do with the same supervising magistrate. In this case, however, the form of the trident varies slightly, having some ornamental scrolls between the prongs and beneath the cross-bar. Perhaps on the gold pieces these scrolls were omitted because of the necessarily smaller scale of the symbol.

Like the silver issues,—both Alexander tetradrachms and Persic staters,—these gold staters are also struck from loose dies, a characteristic of the Cilician mints under Alexander the Great, in contrast to the neighboring Cypriote and Phoenician mints.

GOLD ALEXANDER STATERS.

SERIES II, circa 327–324 B. C.

Head of Athene to r. of exactly similar style and type as on the third group of Series I, except that now a running griffin adorns the helmet.

ΑΛΕΞΑΝΔΡΟΥ on l. Winged Nike standing to l. on basis, holding wreath in outstretched r. and stylis in l. In front of Nike a PLOW.

18 (Müller, no. 11a). Beneath right wing: Thunderbolt.
K . . . . ι London, Plate III, 21.

19 (——), Beneath right wing: Ram's head.
K . . . . κ London, Plate III, 22; Berlin (two specimens).

This new issue of Alexander staters followed immediately upon the third group of the preceding series, as can be seen by the style. Except that the serpent has been changed to a griffin on Athene's helmet, obverse die K is so similar to die J that we have every reason to suppose it was cut by the same artist.

This issue appears to be more local in character than the previous one — at least an additional symbol, the Plow, which may be supposed to have a direct reference to the surrounding district of Tarsos, is here placed on the reverse alongside the changing magistratal symbol. The plow has already appeared on certain issues struck at Tarsos (Brit. Mus. Cat., Pl. xxxii, no. 7) where it forms part of the type, an eagle with extended wings being perched upon it. Like the wheat stalk in the field of the Persic staters of Alexander (figs. 5 to 7) and Mazaios (Plate I, no. 5), or held in the hand of Baal-Tars on other staters of this satrap (Plate I, nos. 1-4) and of Datames (Brit. Mus. Cat., Pl. xxix, nos. 11-15),[33] the plow too may typify the far famed fertility of the Tarsiote plain.[34]

Of the two magistrate's symbols enumerated above, one, the Ram's head, has already appeared as a personal symbol beneath the throne of Baal-Tars on certain varieties of the Mazaios staters (see Brit. Mus. Cat., Pl. xxx, no. 7 and Babelon, Traité II², Pl. cxi, nos. 19, 20, Pl. cxii, no. 1). The time which elapsed between this appearance and the one on the Alexander staters now under discussion perhaps precludes the possibility of this symbol having belonged to one and the same person.

ALEXANDER SILVER ISSUES.

SERIES II, circa 327–324 B. C.

Head of youthful Herakles to r. as on Series I. Circle of dots.

ΑΛΕΞΑΝΔΡΟΥ on r. Zeus with eagle and sceptre as on Series I, except that now he always has heavy locks of hair over the nape of his neck, and the footstool is sometimes missing.

FIRST GROUP.

20 (——). TETRADRACHM.

Beneath throne: Β, Pellet beneath left arm.

XXVIII . . . . *116* Egger Sale, May, 1912, no. 663, Plate IV, 1.

[33] The ear of wheat even forms the reverse type of an early stater of Tarsos (Brit. Mus. Cat., Pl. xxviii, no. 12) and, in connection with the obverse type of the lion and bull, certainly has direct reference to Tarsos and the fertility of its surrounding plain.

[34] See, however, the discussions of this symbol on pp. 102 and 103.

XXIX . . . . *117* E. T. N., Plate IV, 2.
. . . . *118* Amer. Num. Soc.
XXX . . . . *116* E. T. N.
. . . . *117* " Cambridge (McClean Coll.), Plate IV, 3.

21 (Müller, no. 1283). TETRADRACHM.
Beneath throne: Γ, Pellet beneath left arm.
XXVIII . . . . *119* Amer. Num. Soc., Plate IV, 4.
XXXI . . . . *120* E. T. N., Plate IV, 5.

22 (——). DIDRACHM.
Beneath throne: Γ, Pellet beneath left arm.
London (ex Montagu Sale), Plate IV, 6.

23 (——). DRACHM.
Beneath throne: Γ, Pellet beneath left arm.
London, Plate IV, 7.

24 (——). TRIOBOL.
Beneath throne: Γ, Pellet beneath left arm.
London, Plate IV, 8; E. T. N.; Dattari.

25 (——). TETRADRACHM.
Pellet beneath left arm.
XXVIII . . . . *121* E. T. N., Plate IV, 9.
. . . . *122* " Amer. Num. Soc.
. . . . *123* "
XXIX[35] . . . . *124* " Plate IV, 10.
. . . . *125* "
. . . . *126* " (Elder, no. 211).
XXX . . . . *122* Egger Sale, May, 1912, no. 663, Plate IV, 11.
. . . . *123* E. T. N.
. . . . *124* "
. . . . *127* "
. . . . *128* "
XXXII . . . . *121* In the trade.
. . . . *124* E. T. N.
. . . . *127* Elder, no. 188.
. . . . *129* London, Plate IV, 12: E. T. N.
. . . . *130* Elder, no. 48.

26 (Müller, no. 1282). TETRADRACHM.
Pellet beneath throne.
XXXII . . . . *131* E. T. N., Plate IV, 13.

27 (——). TETRADRACHM.
Pellet beneath throne, another beneath left arm.
XXVIII . . . . *132* Oxford (Ashmolean).

[35] Break beneath chin appears. General appearance of die still sharp.

XXIX[36]	. . . . *133*	E. T. N.
	. . . . *134*	" (Elder, no. 97), Plate IV, 14.
	. . . . *135*	Elder, no. 231.
	. . . . *136*	Elder, no. 118.
	. . . . *137*	E. T. N.
	. . . . *138*	L. V. Case.
	. . . . *139*	Toronto.
	. . . . *140*	E. T. N.
XXX	. . . . *140*	"
	. . . . *141*	"
	. . . . *142*	" Plate IV, 15.
	. . . . *143*	"
	. . . . *144*	"
	. . . . *145*	"
	. . . . *146*	Elder, no. 227.
	. . . . *147*	V. Hammer.
XXXII	. . . . *148*	Amer. Num. Soc.
	. . . . *149*	E. T. N., Plate IV, 16.
	. . . . *150*	"
	. . . . *151*	In the trade.
	. . . . *152*	L. V. Case.

28 (Müller, no. 1281). TRIOBOL.

London.[37]

29 (Müller, no. 1284). TETRADRACHM.

Beneath throne: ⊙, Pellet beneath left arm.

XXVIII[38]	. . . . *153*	E. T. N.
	. . . . *154*	"
	. . . . *155*	In the trade.
	. . . . *156*	E. T. N., Plate IV, 17.
	. . . . *157*	"
	. . . . *158*	"
XXIX	. . . . *159*	"
	. . . . *160*	Elder, no. 163.
XXX[39]	. . . . *155*	V. Hammer, Plate IV, 18.
	. . . . *159*	Amer. Num. Soc.; E. T. N.
	. . . . *161*	E. T. N.
	. . . . *162*	"

[36] More breaks appear on this die.

[37] It is uncertain if this variety really exists. Müller claims it to be preserved in the British Museum. But the only specimen the writer is cognizant of is the one catalogued under var. 23.

[38] Die XXVIII now showing effects of long use. Details becoming blurred and break appears beneath nose.

[39] Details becoming blurred.

XXX . . . . *163* E. T. N.
. . . . *164* Oxford (Ashmolean); L. V. Case.
XXXII[40] . . . . *158* E. T. N., Plate V, 1.
. . . . *159* In the trade.
. . . . *160* E. T. N.
. . . . *165* "

30 (——). TETRADRACHM.

Beneath throne: ⊙ Pellet beneath left arm, another between sceptre and throne.

XXIX . . . . *166* E. T. N., Plate V, 2.
. . . . *167* In the trade.
XXXII . . . . *168* Oxford (Ashmolean); E. T. N.

31 (Num. Zeitschrift, vol. I, 1869, p. 55, no. 317). DRACHM.

Beneath throne: ⊙

Berlin.

SECOND GROUP.

The general characteristics of this group are broader flans, the footstool always present, and the inscription ΑΛΕΞΑΝΔΡΟΥ always written in a straight line.

32 (——). TETRADRACHM.

Beneath throne: IVY LEAF (pointing upwards).

XXXIII . . . . *169* E. T. N., Plate V, 3.
XXXIV . . . . *170* " Plate V, 4.

33 (——). TETRADRACHM.

Beneath throne: IVY LEAF (pointing downwards).

XXXV . . . . *171* E. T. N., Plate V, 5.

34 (Num. Zeitschrift, vol. I, 1869, p. 38, no. 81). TETRADRACHM.

Beneath throne: BUNCH OF GRAPES.

XXXVI . . . . *172* E. T. N.
. . . . *173* " Plate V, 6.

35 (——). TETRADRACHM.

Beneath throne: Pellet over BUNCH OF GRAPES.

XXXIV . . . . *174* E. T. N., Plate V, 7.
. . . . *175* "
. . . . *176* "
XXXVII . . . . *176* " Plate V, 8.

36 (——). TETRADRACHM.

Beneath throne: Two pellets over BUNCH OF GRAPES.

XXXIV . . . . *177* Oxford (Ashmolean), Plate V, 9.
XXXVIII . . . . *178* E. T. N. (Elder, no. 186), Plate V, 10.
. . . . *179* "

[40] New breaks appear and details growing blurred.

37 (——). TETRADRACHM.

Pellet over left arm.

XXXVIII	. . . . *180*	Oxford (Ashmolean); E. T. N., Plate V, 11.
XXXIX	. . . . *181*	E. T. N., Plate V, 12.
	. . . . *182*	"

38 (——). TETRADRACHM.

Beneath throne: ⊙ Pellet over left arm.

XXXVIII[41]	. . . . *183*	E. T. N.
	. . . . *184*	" Plate V, 13.
XXXIX	. . . . *185*	"
	. . . . *186*	"
	. . . . *187*	Oxford (Ashmolean).
XL	. . . . *188*	E. T. N. (Elder, no. 104).
	. . . . *189*	" Plate V, 14.
	. . . . *190*	Egger Sale, May, 1912, no. 664.
XLI	. . . . *191*	E. T. N.
	. . . . *192*	"
	. . . . *193*	F. M. Endicott, Plate V, 15.

THIRD GROUP.

Similar to preceding except that the title BAΣIΛEΩΣ is now added to AΛEΞ-ANΔPOY on the reverse.

39 (Müller, no. 1280). TETRADRACHM.

XLI	. . . . *194*	Toronto; E. T. N., Plate VI, 1.
	. . . . *195*	E. T. N.
	. . . . *196*	"
	. . . . *197*	Cambridge (Leake Coll.).
	. . . . *198*	E. T. N.

40 (Müller, no. 1285). TETRADRACHM.

Beneath throne: ⊙ Pellet over left arm.

XXXIX[42]	. . . . *199*	E. T. N., Plate VI, 2; another in the trade.
	. . . . *200*	In the trade.
XLI	. . . . *201*	E. T. N., Plate VI, 3.

Accompanying the staters of Series II and following immediately upon the tetradrachms of Series I and the first issue of Persic silver staters comes a new issue of Alexander tetradrachms. These, like the gold, are all distinguished by the symbol PLOW accompanied by magistrate letters, symbols, or pellets. It seems possible, as was suggested above, that we here have to do with a real mintmark,—that is, a sym-

[41] Flaw on neck and jaw increasing, other signs of wear beginning to show.

[42] Obverse die becoming very much worn.

bol intended to definitely mark these particular coins as having been struck at Tarsos. On the other hand, the succeeding issues, as we will soon see, do not confirm this assumption and the PLOW may, after all, be only the personal symbol of the chief magistrate supervising the coinage. Limited as our present knowledge is of the coinages struck during the lifetime of Alexander the Great, it would never-the-less seem as if the four principal cities of Phoenicia (Arados, Byblos, Sidon, Ake), Damaskos the metropolis of Coele-Syria, and the cities of Cyprus were the only mints allowed to place marks of definite local significance upon their Alexander issues. Now we know for a certainty that Cyprus was never subjugated by Alexander; its princes and cities, however, became his allies and were treated as such, retaining possession of their own fleets and armies as well as their immemorial right of coinage.[43] Under the Persian empire the Phoenician cities of Arados, Byblos, Sidon and Tyre were *allies*[44] — not subjects — of the Great King. As Alexander made it a practice in the eastern portion of his empire to take over, with as little change as possible, the customs and conditions of rule of the Persian régime it is, *a priori*, likely that Arados, Byblos and Sidon became his allies when they voluntarily deserted the Persian cause and placed their fleets and resources at his disposal. The fact that history distinctly mentions the Phoenician princes and the Phoenician fleets after this time, together with the local character of their Alexandrine issues, shows this surmise to be the correct one. Under the Persians Tyre was the fourth member of this group, but when in 333 B. C. she refused to receive Alexander within her walls and remained loyal to the Persian cause, she was besieged, taken, practically destroyed, and her population sold into slavery. The considerable city of Ake, a few miles to the south, seems then to have taken her place. At least we are led to this surmise by the absence of any Alexander coinage attributable to Tyre much before the end of the fourth century B. C., while Ake during this very period issued a prolific coinage marked by the dates of a local era and the city's name in Phoenician characters. Of the position that Damascus enjoyed at this period we know little or nothing, but as she was a rich and powerful metropolis, and was allowed to place her initials and symbol (the ram) upon her Alexander coinage, perhaps she too, like her Phoenician neighbors, was an ally rather than a subject of the new order of things.

[43] Num. Chron., *loc. cit.*

[44] Herodotus, iii, 19; Hieronymus, "Adv. Jovinian," i, 45; "Persarum foedus Aegyptii regis societate neglexerat" (Strato).

Now the purpose of this digression has been to emphasize the point we have apparently gained, namely, that wherever it has been possible to establish the local significance of certain symbols and letters appearing on coins struck in the East during Alexander's lifetime, in every case such coins are attributable to some allied or semi-independent community. As the number of such cities as well as such specially marked coinages is practically limited to the ones just mentioned, it follows that the Alexandrine coinage of this period, struck in the cities subject to the central government, was not permitted to bear marks of true local significance. In other words the symbols and letters found on them are magistratal and not municipal. In turning to the remainder of Alexander's eastern issues there is not a symbol or monogram, except those enumerated above, which can satisfactorily be proved to have belonged to a locality rather than to a magistrate. We therefore have no reason to expect a local symbol on the Alexandrine coinages at Tarsos. As pointed out before, the only truly municipal coinage of Tarsos at this period were the Persic staters of local types. It is consequently not at all certain that the PLOW has any real local significance, but was probably the personal badge of the supervising magistrate.

With the appearance of the present series, marked by the PLOW, a change seems to have taken place in the internal arrangements of our mint. No longer do the coins present any evidence that they were produced in two more or less independent branches, or "officinae," of the imperial mint establishment. Within each of the three groups, into which it has seemed advisable to divide the present series, obverse dies are used indiscriminately in conjunction with the many varieties observable in reverse dies. These three groups are consecutive and not, perchance, contemporary as proved by progression of style and the constant reuse of worn reverse dies from a preceding group.

Our series opens with the magistrate B, of Series I, still in office. He however does not long remain as he places his initial only on the first few issues. That these are the first issues of the new series is definitely shown by the fact that the obverse dies XXVIII, XXIX and XXX do not here reveal the pronounced fractures and other signs of wear so evident on them not long afterward. The remainder of this series bears the signatures Γ, ⊙, IVY LEAF and BUNCH OF GRAPES, accompanied by various arrangements of dots or pellets, the whole issue supervised by the magistrate whose symbol is the PLOW (if indeed the Plow is not a mintmark of Tarsos itself).

The entire sequential arrangement of Series II is here based on progressive signs of wear observable in the obverse dies used, guided by the obvious progression in style and technique displayed by the dies themselves. It is noticeable, as our series advances, that the flans tend to grow broader — and therefore thinner, — the relief lower, the design more spread, the artistic qualities more stereotyped but the actual execution of details perhaps a little better.

The length of time assigned to our series (circa 327-324 B. C.) is based on two observations. Series I, with its twenty-seven obverse dies and one hundred and fifteen reverse dies, we had reason to believe must have covered about six years. On the strength of this our present series with its fourteen obverse dies and eighty-five reverse dies ought to have covered at least three years. In following up this indication we then find that our third group of Series II, characterized by the presence for the first time of the title βασιλεύς, would fall about 324 B. C. Now it has been the writer's experience in studying the early Alexander coinages of Macedonia and Babylon that their first use of this title seems to have occurred about a year or so previous to the death of Alexander, or between 325 and 324 B. C. A discussion of the reasons for this innovation at this particular time would probably only lead to indefinite results. In passing, the writer would therefore prefer to merely hazard the suggestion that the title was for the first time adopted on the royal coinage in this year in consequence of the glorious news that must then have reached the west from India. It was in 325 B. C. that Alexander had finally overcome all resistance in the last remaining province of the Persian Empire, and therefore that empire, in its fullest extent, now acknowledged him as its sovereign and overlord in place of the Persian king. Alexander was by right of birth βασιλεύς of Macedonia and Thrace, and now, by right of conquest, he takes the place of the Persian βασιλεύς. As such the central and royal mints of Macedonia, of Tarsos and of Babylon would now seem to have definitely proclaimed him on their respective coinages.

The material on which our studies of Series II is based is somewhat more complete than that of Series I. The result being that for the present series we know of fourteen obverse and eighty-five reverse dies — an average of six reverse dies to one obverse. This more closely approaches what would seem to have been the usual proportion in ancient mints due to the greater wear and tear that had to be endured by the reverse die. As, in the present case, the obverse dies seem to have

been indiscriminately used with various reverse ones we have the following unusually high proportions of actual usage: die XXXII is found associated with no less than sixteen reverses, die XXIX with seventeen, and die XXX with twenty-one. Because of the indiscriminate use in this particular case of various reverse dies, this perhaps does not give us a fair idea of the true average of reverse and obverse dies actually cut for use in an ancient mint.

ALEXANDER ISSUES.

SERIES III, circa 324–319 B. C.

FIRST GROUP.

TETRADRACHM.

Head of Herakles as on preceding issue (third group).

Similar type, style, and inscription as on preceding issue (third group).

BRONZE. Same types as no. 11.

41 (Müller, no. 1286). TETRADRACHM.

In field, AP, beneath throne, ⊙.

Obverse die.	Reverse die.	
XLII	*202*	E. T. N.; London, Plate VI, 4; Egger Sale XL, 1912, no. 732.
	203	London.
	204	Oxford (Ashmolean).
XLIII	*205*	E. T. N. (two specimens); Toronto, Plate VI, 5.

42 (Num. Zeitschr., vol. I, 1869, p. 39, no. 92). TETRADRACHM.

In field, WREATH-BEARING NIKE to r. Beneath throne, FA.

XLIV	*206*	E. T. N.
	207	Amer. Num. Soc.
XLV	*206*	E. T. N., Plate VI, 6 (obverse).
XLVI	*207*	" Plate VI, 6 (reverse).

43 (Müller, nos. 198 and 200). TETRADRACHM.

In field, WREATH-BEARING NIKE to r. Beneath throne, AN.

XLIV	*208*	E. T. N.; Gotha.
	209	Egger Sale, XL, 1912, no. 697.
	210	In the trade.
	211	E. T. N., Plate VI, 7.
	212	"
	213	L. V. Case.
	214	L. V. Case.
XLV	*215*	Boston, Plate VI, 8.
	216	In the trade.
XLVI	*213*	L. V. Case.

XLVI . . . . *217* E. T. N., Plate VI, 9.
. . . . *218* Oxford (Ashmolean).
. . . . *219* E. T. N.
XLVII . . . . *219* " Plate VI, 10.
. . . . *220* "
. . . . *221* Cambridge (Fitzwilliam).
. . . . *222* Egger Sale, 1912, no. 697.
. . . . *223* E. T. N.

44 (Müller, no. 215a). BRONZE.
Types similar to no. 11.
Obverse, CADUCEUS in front of face.
Reverse, CADUCEUS above club.
Berlin ; Copenhagen.

45 (——). BRONZE.
Similar.
Obverse, CADUCEUS in front of face.
Reverse, CADUCEUS above club, | below bow.
E. T. N. (countermarked, Triskelis), Plate VI, 11.

46 (——). BRONZE.
Similar.
Obverse, CADUCEUS in front of face.
Reverse, CADUCEUS above club, STAR beneath quiver.
E. T. N. (two specimens).
Yale Univ. Coll. (Star takes form of Aramaic ס).

SECOND GROUP.

Types.

STATER.

Head of Athene to r. in crested Corinthian helmet adorned with serpent, hair in formal curls.

ΑΛΕΞΑΝΔΡΟΥ (on r.), ΒΑΣΙΛΕΩΣ (on l.). Nike advancing to l. holds wreath in outstretched r. and victory-adorned stylis in l.

TETRADRACHM.

Head of young Herakles of advanced style to r. Circle of dots.

ΒΑΣΙΛΕΩΣ (above), ΑΛΕΞΑΝΔΡΟΥ (on r.). Zeus of advanced style seated to l., legs parallel and feet resting on footstool, holds eagle in outstretched r. and sceptre in l.

47 (Müller, no. 198). TETRADRACHM.
In field, WREATH-BEARING NIKE to r. Beneath throne, Ⲛ | ⊙.
XLVIII . . . . *224* E. T. N.
XLIX . . . . *225* " Plate VI, 12.
. . . . *226* "

XLIX	. . . . *227*	E. T. N.; Egger Sale, 1912, no. 697.
	. . . . *228*	Oxford (Ashmolean).
L	. . . . *227*	E. T. N.
	. . . . *229*	" Plate VI, 13.
	. . . . *230*	Toronto.
LI	. . . . *231*	E. T. N., Plate VI, 14.
	. . . . *232*	" ; another in the trade.
LII	. . . . *232*	V. Hammer, Plate VII, 1.
LIV	. . . . *233*	F. M. Endicott, Plate VII, 2.
	. . . . *234*	Oxford (Ashmolean).
	. . . . *235*	In the trade.
LV	. . . . *236*	In the trade, Plate VII, 3.
	. . . . *237*	Cambridge (Leake Coll.).
	. . . . *238*	Egger Sale, 1912, no. 604.
LVI	. . . . *239*	F. M. Endicott, Plate VII, 4.
	. . . . *240*	Toronto.
	. . . . *241*	E. T. N.

48 (Num. Zeitschr, vol. I, 1869, p. 34, no. 30). STATER.
In front of Nike, A | ≤.

L	. . . . λ	Berlin; London, Plate VII, 5; Petrograd; Yakountchikoff; Egger Sale, 1912, no. 378.

49 (Num. Zeitschr., vol. I, 1869, p. 38, no. 91). TETRADRACHM.
In field, WREATH-BEARING NIKE to r. Beneath throne, A | ≤.

L	. . . . *242*	In the trade.
LII	. . . . *243*	E. T. N., Plate VII, 6.
	. . . . *244*	"
LVII	. . . . *245*	F. M. Endicott, Plate VII, 7.
LVIII	. . . . *246*	F. M. Endicott, Plate VII, 8; in the trade.
	. . . . *247*	E. T. N.; London.
	. . . . *248*	"
LIX	. . . . *249*	Oxford (Ashmolean).
	. . . . *250*	E. T. N., Plate VII, 9.

THIRD GROUP.

Types.

STATER.

Head of Athene to r., as before. Formal curls on dies L, M, O, P, flowing locks on dies N and Q.

Inscription and types same as on preceding stater, no. 48.

TETRADRACHM.

Head of young Herakles as before. On earliest dies a circle of dots, later dies plain.

Inscription and types as on preceding tetradrachms. The Zeus throne henceforth has legs of special type. The entire reverse design is surrounded by plain circle.

BRONZE.

Head of young Herakles. ΑΛΕΞΑΝΔΡΟΥ between club and bow in quiver.

50 (Müller, no. 213). STATER.

On extreme left, CADUCEUS. In front of Nike, Ε | Ξ.

L . . . . μ Paris, Plate VII, 10.

M . . . . ν Berlin, Plate VII, 11 (obv.); Petrograd, Plate VII, 12 (rev.).

. . . . ξ Hague, Plate VII, 13.

N . . . . ο London, Plate VII, 14; Petrograd.

51 (Müller, no. 204). TETRADRACHM..

In field, WREATH-BEARING NIKE and CADUCEUS.

Beneath throne, Ε. In exergue, Ξ.

LX . . . . *251* Paris, Plate VII, 15; another in the trade.

. . . . *252* In the trade.

52 (Müller, no. 214). STATER.

On obverse, ⊙.

On reverse, on extreme left, CADUCEUS. In front of Nike, Ε | ⊙.

O . . . . π[45] London, Plate VII, 16; Berlin.

. . . . ρ Paris; Petrograd.

. . . . σ Petrograd.

P . . . . σ E. T. N, Plate VII, 17.

Q . . . . τ London, Plate VII, 18; E. T. N.

53 (Müller, no. 201). TETRADRACHM.

In field, WREATH-BEARING NIKE to r., CADUCEUS.

Beneath throne, Ε. In exergue, ⊙.

LIII . . . . *253* Oxford (Ashmolean).

. . . . *254* E. T. N.

. . . . *255*[46] " Plate VIII, 1.

LIV . . . . *255* " Plate VIII, 2.

LVI . . . . *256* " Plate VIII, 3.

54 (——). TETRADRACHM.

In field, WREATH-BEARING NIKE to r., CADUCEUS.

Beneath throne Ε | ⊙.

LXI . . . . *257* E. T. N.

. . . . *258* " Plate VIII, 4.

. . . . *259* "

LXII . . . . *259* "

. . . . *260* Toronto.

. . . . *261* E. T. N.

[45] On this reverse die the ⊙ has been re-engraved over the Ξ.

[46] On reverse die 255 the ⊙ is placed above the exergual line and alongside of the monogram.

LXII . . . . *262* E. T. N.
. . . . *263* In the trade.
. . . . *264* Egger Sale XL, 1912, no. 698, Plate VIII, 5.
. . . . *265* Cambridge (Leake Coll.).
. . . . *266* E. T. N.

55 (——). TETRADRACHM.
Obverse die has B beneath neck.
Reverse same as above.
LXIII . . . . *267* Oxford (Ashmolean) Plate VIII, 6.

FOURTH GROUP.

56 (Müller, no. 203). TETRADRACHM.
In field, WREATH-BEARING NIKE to r., CADUCEUS, and B.
Beneath throne, Ε.
LIII . . . . *268* London, Plate VIII, 7.
LXIV . . . . *269* E. T. N., Plate VIII, 8.

57 (——). TETRADRACHM.
Obverse die has B beneath neck.
Reverse same as no. 56.
LXIII . . . . *270* F. M. Endicott, Plate VIII, 9.
. . . . *271* E. T. N.
. . . . *272* R. Storrs; E. T. N.
. . . . *273* E. T. N.
. . . . *274* Cambridge (Fitzwilliam); E. T. N.

58 (——). TETRADRACHM.
In field, WREATH-BEARING NIKE to r., CADUCEUS, and ⊙.
Beneath throne, Ε.
LIII . . . . *275* L. V. Case, Plate VIII, 10.
LXV . . . . *276* E. T. N., Plate VIII, 11.
LXVI . . . . *277* Hirsch Sale XVI, 1906, no. 379 (Pl. xii).

59 (——). TETRADRACHM.
In field, WREATH-BEARING NIKE to r., CADUCEUS, and Ξ.
Beneath throne, Ε.
LXVI . . . . *278* E. T. N.; Oxford (Ashmolean), Plate VIII, 12.
. . . . *279* " ; Egger Sale XL, 1912, no. 697.
LXVII . . . . *279* "
. . . . *280* " Plate VIII, 13.
LXVIIa[47] . . . . *281* " (ex Oertel Sale, 1913, no. 106), Plate VIII, 14.
. . . . *282* "

[47] This die is the preceding die (LXVII) re-engraved.

60 (Müller, no. 212). BRONZE.
Obverse, CADUCEUS in front of face.
Reverse, CADUCEUS above, Ε below.

61 (Müller, no. 215). BRONZE.
Obverse, CADUCEUS in front of face.
Reverse, CADUCEUS and ⊙ above, Ε below.
Vienna, **Plate VII**, 19; E. T. N.

The first group of the present series is closely bound by style, inscription, and the magistrate ⊙ with the fourth and last group of the preceding series, as the reader can determine for himself by comparing nos. 1 to 10 inclusive on Plate VI. That the present series of coins must belong to the same mint as Series I and II is therefore certain. At first the magistrate ΓΑΡ replaces the PLOW of the previous series, but is himself soon superseded by a magistrate whose symbol was a WREATH-BEARING NIKE. The subordinate officials for the first group of Series III are ⊙, ΓΑ, and ΑΝ which soon assumes the form Ν. The accompanying bronze coins (nos. 44 and 45) bear none of these symbols or monograms but are provided on both obverse and reverse with the CADUCEUS symbol. This same symbol occurs on all the gold, silver, and bronze coins of the succeeding third and fourth groups, but the more characteristically Cilician style of nos. 44 and 45 place them in the first group, as can be seen by the illustration of one specimen on Plate VI.

The second group of the present series is distinguished by the fact that henceforth the purely Cilician character of the art employed gives way to an art more consistent with the canons of pure Greek style. Some of the dies are very fine productions and well worthy of the best traditions of Greek art. I would call particular attention to Plate VII, nos. 3, 4 and 8, Plate VIII, nos. 1 and 3. With this group the coinage in gold recommences. Instead of being issued, as heretofore, under the supervision of special magistrates whose symbols do not occur on the accompanying silver coins, henceforth it is evident that the same magistrates were now employed to supervise the coinage of all three metals.

For the third and fourth groups the system of control has become somewhat more complicated. Each tetradrachm is signed by three constant magistrates, NIKE, CADUCEUS and Ε. In addition three subordinates Β, ⊙, and ≤ alternate on the dies. Besides this, ⊙ signs himself on an obverse die of the gold coinage, Β on an obverse die

(LXIII) of the tetradrachms. These two magistrates are very probably the same we have met with before in previous series.

Under the heading Series III the material at present available for study is less than for Series I and II. The result is that to the twenty-seven known obverse dies we have at present but eighty-one reverse dies — or exactly the ratio 1 : 3. Experience has shown that this ratio is probably far too small with regards to the original number of reverse dies cut. Future finds and the unstudied public and private collections of Europe will undoubtedly more than double their number. To Series I with its twenty-seven obverse dies we have assigned a period of six years 333-327 B. C., to Series II with its fourteen obverse dies we suggested a period of three years or 327-324, therefore, to Series III with its twenty-seven dies (really only twenty-six for one die was recut and used again) we may well assign the period 324-319 B. C. The adoption of the year 319 B. C., as the final year in which the coins of Series III could have been issued, is corroborated by the great hoard of Alexander tetradrachms found at Demanhur, Egypt. This hoard contained specimens of all the tetradrachms we have incorporated in the present study, but not a single one of the later Tarsiote issues. All the specimens of Series III from this find were in extremely fine or brilliant condition showing that they must have been struck but a short time previous to the hoard's burial. As shown in my work on the Alexander coinages of Sidon and Ake the hoard in question could not have been buried previous to the year 319/318 B. C., while internal evidence would seem to show that it was actually interred about 318/317 B. C. Thus it is most likely that the five years immediately preceding the burial saw the issuing of our tetradrachms of Series III. It would thus seem evident that the coins of Series III extended down to at least about 320/319 B. C. By incorporating them we have passed by some four years the limits set for the present study. The coins of Series III, however, as a whole are so closely bound together by style and magistrates, forming a single issue of several years' duration, that it would have been inadvisable to separate them. It is probable that the "First Group" appeared while Alexander was still alive, the remaining three groups during the troubled times that followed his death.

ISSUE OF PERSIC STATERS.

SERIES II.



Fig. 15

Baal-Tars, himation over l. arm and crossed legs, seated to l. He rests r. arm on sceptre. In field before him, ear of wheat and bunch of grapes. Beneath throne varying mintmarks. Circle of dots.



Fig. 16

Bust of Athene in triple-crested Attic helmet, nearly facing, inclined to l., wears ear-rings and necklace. In field sometimes letters and symbols. Border of dots.



Fig. 17



Fig. 18

FIRST GROUP (B on right of Baal-Tars).

g. Beneath throne, M. Plain.
To right of Baal-Tars, B.

London, no. 69 (Pl. xxxi, 10); Paris, no. 249.

h. Beneath throne, I. Plain.
To right of Baal-Tars, B.

London, no. 67 (Pl. xxxi, 8) fig. 15; Hague; Berlin; Ratto, Sale of 1912, no. 1063 (formerly O'Hagan Coll., Sotheby, 1908, no. 628).

i. Beneath throne, ⋚. Plain.
To right of Baal-Tars, B.

London, no. 71 (Pl xxxi, 12); Ratto, Sale of 1912, no. 1064 (formerly Hirsch Sale XXV, 1909, no. 2771).

SECOND GROUP (Plain obverse).

j. Beneath throne, M. Plain.

E. T. N.; Paris; Berlin.

k. Beneath throne, M. Bunch of grapes and T.

Paris, nos. 247 (Pl. vi, 2) and 248.

l. Beneath throne, ⋚. Plain.

London, no. 70 (Pl. xxxi, 11); Paris, no. 250; Sotheby, Cumberland-Clark Sale, 1914, no. 252 (formerly Merzbacher, Nov., 1909, no. 3159).

m. Beneath throne, ≷. Corinthian helmet on left.
Paris, no. 251 (Pl. vi, 3), fig. 16.
n. Beneath throne, ⊦. ⊦ — ≷.
Paris, no. 246.
o. Beneath throne, ⊦. Corinthian helmet, bunch of grapes and ⊤.
London, no. 68 (Pl. xxxi, 9).

THIRD GROUP (B and Helmet on obverse).

p. Beneath throne, ≷. ⊦ — ≷.
To right of Baal-Tars, B and Corinthian helmet.
London, no. 72 (Pl. xxxi, 13) fig. 17; Carfrae Sale, Pl. x, no. 1.
q. Beneath throne, ⊤. Plain.
To right of Baal-Tars, B and Corinthian helmet.
London, no. 75.

FOURTH GROUP (B and Ivy Leaf).

r. Beneath throne, ⊤. Plain.
To right of Baal-Tars, B and Ivy Leaf.
London, no. 77 (Pl. xxxii, 3); Paris, nos. 253, 254 (Pl. vi, 4) and 255; Berlin; Vienna.
s. Beneath throne, ⊤. Ivy Leaf.
To right of Baal-Tars, B and Ivy Leaf.
London, no. 73 (Pl. xxxi, 14), fig. 18.
t. Beneath throne, ⊤. Corinthian Helmet.
To right of Baal-Tars, B and Ivy Leaf
London, no. 78; Berlin.

FIFTH GROUP (Ivy Leaf on Obverse).

u. Beneath throne, ⊤. Plain.
To right of Baal-Tars, Ivy Leaf.
E. T. N.; London, no. 74 (Pl. xxxii, 1); Munich.
v. Beneath throne, ⊤. Bunch of Grapes, ⊤.
To right of Baal-Tars, Ivy Leaf.
London, no. 76 (Pl. xxxii, 2); Naples.
w. Beneath throne, ⊤. Ivy Leaf.
To right of Baal-Tars, Ivy Leaf.
Vienna.

PERSIC OBOL.

Head of Athene facing as on preceding staters. Shield of so-called Boeotian shape; on it, thunderbolt. In field, star.

x. London, no. 79 (Pl. xxxii, 4).

This large and somewhat complicated series of Persic staters has long[48] been recognized as having been struck subsequently to the incorporation of Cilicia into Alexander's empire. Like the previous series described above on page 84 this too was evidently a municipal issue struck in the central mint at Tarsos for the four cities of Issos, Mallos, Soloi and Tarsos. The initial letters of these cities appear singly on the obverses beneath the throne of Baal, while, at times, the additional mint marks T and IΣ occur on the reverses. The entire series has so often been discussed at length by such competent scholars as M. Six, Mr. G. F. Hill, and M. Babelon, that it is quite unnecessary to treat of it again in detail except in so far as new light may have been thrown upon it by our study of the contemporaneous issues of Alexander at Tarsos.

It is to be observed that, according to the letters they bear, the First and Second Groups of these staters were struck exclusively for the three municipalities of Mallos, Soloi and Issos. The striking itself, however, took place at Tarsos. The identity in style and technique between these two groups and the Fourth and Fifth Groups is very evident. But the latter can only have been struck in Tarsos as their coins are marked exclusively with T. Furthermore, staters k and o have reverses struck from dies intended for the Fifth Group which bear the letter T. That the dies were all really cut in one mint would seem to be further proved by the fact that the obverses of the two coins illustrated as nos. 9 and 11 on Plate xxxi of the British Museum Catalogue appear to be identical. In this case I, the initial letter of Issos, has been re-engraved over a preceding Σ, the initial of Soloi, but traces of the erased sigma are still plainly visible. It also appears likely that in the case of no. 8 of Plate xxxi of the same catalogue and no. 1, Plate vi of the Paris catalogue the obverse dies have likewise been altered. Here the letter I has been re-engraved over a preceding T, traces of the cross bar of the tau being still visible.

The Fourth and Fifth Groups, were, as stated above, struck exclusively for Tarsos, as their coins in no instance bear any other letter than T. Furthermore, these are the only varieties which bear the IVY LEAF symbol, and the ivy appears to have been held in peculiar veneration at Tarsos.[49] As a symbol the BUNCH OF GRAPES seems also to be closely

[48] First suggested by M. Babelon, "Les Perses achéménides," Paris, 1893, p. xlvi.

[49] As recently pointed out to me by Prof. Frothingham, whose work on this subject is expected to appear shortly. The entire subject was discussed by him at the meeting of the Archaeological Institute of America held Dec. 27-29, 1917.

associated with our mint and occurs on these Persic staters always accompanied by the letter T. In passing it should be noted that these same two symbols appear on the Alexander tetradrachms nos. 32 to 36 of Series II.

Another interesting point brought out by these staters is the apparent fact that their issue was supervised by our old friend B who has been found so active, not only on the first re-issue of the Persic stater but also on many of the Alexander issues we have here brought together and assigned to Tarsos.

The most important thing for us to determine at present is the exact date at which this second re-issue of the Persic stater took place. Here unfortunately we find the opinions of students of the subject considerably at variance. The Due de Luynes in his great work on the coinage of the Persian satraps (*Essai sur la Numismatique des Satrapies et de la Phénicie sous les Rois achaeménides*) would date these handsome coins with the Athene bust "antérieur à la conquête d'Alexandre" (p. 64); J. P. Six (Num. Chron., 3rd Series, vol. IV, page 127) places them between 373 and 351 B. C.; M. Babelon (*Les Perses achéménides*, nos. 245-255) gives them to Mazaios who ruled in Cilicia from 361 to 333 B. C., but also suggests (*loc. cit.*, page xlvi) that they may have been issued by Bálakros, Satrap of Cilicia under Alexander; more recently M. Babelon (Traité II², page 461ff) definitely assigns them to the period after the conquest of Cilicia by Alexander; while, finally, Mr. Hill in the British Museum Catalogue of the coins of Cilicia reverts to the earlier opinion and assigns them to the 'Period of Mazaios.'

In view of what we have learned by our study of the first re-issue of the Persic stater and of the accompanying Alexander tetradrachms, I think we have every reason to agree with M. Babelon's final opinion as expressed in the second volume of his Traité, namely that these Athene staters must have been struck subsequently to the coming of the Greeks and the incorporation of Cilicia into Alexander's empire. Every criterion of style and technique would also point to their having been issued later than the staters a to e (pages 84 and 85), a fact recognized by both Mr. Hill and M. Babelon. Therefore we arrive at the definite conclusion that they could not have been struck earlier than 328 or 327 B. C., which period we have every reason to believe saw the appearance of the first re-issue of the Persic stater. But when we would determine the exact year in which the second re-issue appeared we immediately find ourselves in difficulties. Whereas the style of

nos. a to e definitely and clearly associate their appearance with certain contemporary Alexander tetradrachms (the last coins of our Series I and the first coins of our Series II), in other words in and around the years 328 and 327 B. C., we are not so aided by the style of nos. g to w now under discussion. The presence on the latter of the symbols BUNCH OF GRAPES and IVY LEAF would seem indeed to associate these pieces very closely with the Alexander tetradrachms nos. 32-36. On the other hand, the details of the Baal figure — criteria so useful to us in determining the approximate date of the first re-issue — in the present case do not at all correspond with those of the Zeus figure on the tetradrachms (nos. 32-36) just mentioned. Our Baal figure now has loose, flowing locks instead of stiff ringlets, his feet are crossed instead of being placed parallel to each other and they do not rest upon a footstool, while the details of the throne are entirely different. In fact, almost the only point of resemblance is to be found in the drapery whose folds are similarly represented by a succession of double lines.

The die cutter of the Alexander coins 32-36 could not possibly have been the die cutter of the Athene staters, the latter being infinitely the better artist of the two. Never-the-less the letters M, ≤, I, T, and the magistrate's initial B, would indeed seem to associate these staters with the first re-issue, and, until new evidence to the contrary appears, the writer would consider them as having followed immediately upon the first re-issue. Now we have seen that the first re-issue occurred at the time when Series I of the Alexander tetradrachms gave way to Series II. We have also noticed that the important magistrate B signed only a very few coins of this Series II and then disappears entirely from the *Alexander* coinage until we come to Series III, Group IV, when his familiar initial appears once more on both the gold and silver coins. The suggestion certainly lies to hand that during this interval he was actually supervising the second re-issue of the Persic staters where his initial frequently occurs. The appearance of the two symbols BUNCH OF GRAPES and IVY LEAF on both the Persic staters and on certain of the Alexander tetradrachms (nos. 32-36) would favor this supposition. The difference in style between these two categories of coin must then be accounted for by assuming that their dies were produced by different artists, a far from difficult assumption. Certainly more than one artist must have been working in the Tarsos mint at this time. At a very slightly later period, for instance, it is impossible to suppose that one and the same artist could have produced the absolutely contempo-

raneous reverse dies of nos. 2 and 3, Plate VII, or the similarly contemporaneous obverse and reverse dies of nos. 6 and 7 on the same plate.

If this suggestion be found unsuitable, the only other possible solution of the difficulty would be to suppose that the second re-issue of the Persic stater took place either contemporaneously with the appearance of the Fourth Group of Series III or immediately following. Indeed throughout that Series a steady improvement of style in the Alexander series is very noticeable until towards the end, it much more nearly approaches that found on our staters. Especially in the structural details of their legs the Baal throne and the Zeus throne are now no longer so dissimilar. Furthermore, the B no longer would appear on the Persic staters alone but is once more in evidence on the Alexander tetradrachms.

The difficulties of finally determining the exact date of the second re-issue are apparent and the writer reluctantly leaves the inquiry in this somewhat unsatisfactory state until further material becomes available. This much, however, has been gained, namely that we are certain that the second re-issue must have taken place not earlier than 328-327 B. C., or much later than 320-319 B. C., and that it was neither a satrapal nor an autonomous issue, but, like the first re-issue, a municipal undertaking issued at the Tarsos mint for the four principal cities of eastern Cilicia.

With these coins our studies of the varied and interesting currencies put forth by the evidently very important mint existing at Tarsos in the lifetime of Alexander the Great, come to an end. Although after his death further series of his coins continued to appear — one or two of which we have indeed incorporated in this article — the writer has not deemed it advisable to carry on the study beyond this point. What was intended for only a short paper has already grown to unexpected length while insufficient material is as yet available to him for the careful study of the later issues. With the end of the Great War at hand it may soon become possible to remedy this lack, and until then it would certainly be unwise to attempt to base definite conclusions on a study of inadequate material.

Note. By an inadvertance the two coins illustrated in fig. 3, page 81, have become interchanged. The one on the left should have been assigned to Ake, the one on the right to Tarsos.



1 2 3 4 5

First Group, "Officina" A



6 8 10 12 14

7 9 11 13 15

First Group, "Officina" B



16 17 18 19

Second Group, "Officina" A



20 21

PERSIAN SATRAPAL ISSUES nos. 1-5; ALEXANDER ISSUES, SERIES I, nos. 6-21.

Second Group, "Officina" A

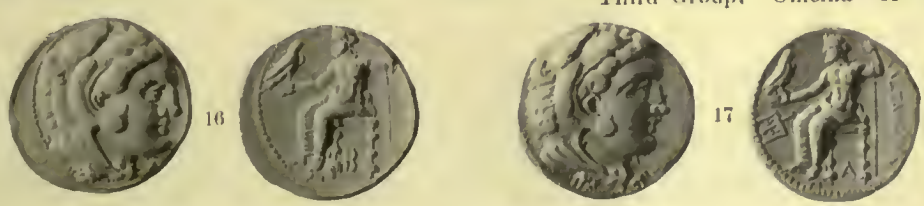


Second Group, "Officina" B





Third Group, "Officina" A



SERIES I (continued).

Third Group, "Officina" A (continued).



Third Group, "Officina" B



SERIES I



SERIES II



SERIES I (continued) nos. 1-13. GOLD STATERS, SERIES I, First Group, no. 14, Second Group, nos. 15-18, Third Group, nos. 19-20; SERIES II, nos. 21, 22.



SERIES II, First Group

First Group (continued).



1



2

Second Group.



3 4 5 6 7



8 9 10 11



12 13 14 15



SERIES II (continued)



SERIES II, Third Group, nos. 1-3; SERIES III, First Group, nos. 4-11; SERIES III, Second Group, nos. 12-14.



SERIES III, Second Group (continued) 1-9; Third Group, 10-18; Fourth Group, 19.



SERIES III, Fourth Group.

THE ALEXANDRINE COINAGE OF SINOPE

BY EDWARD T. NEWELL

In the third century B. C. one of the districts most actively engaged in coining money of the Alexander type comprised the western and southern shores of the Black Sea. Busy commercial centres such as Istrus, Callatis, Odessus, Messembria, Heraclea Pontica, and others of lesser importance, issued large quantities of that evidently popular type of coin. It should not be very surprising, therefore, to learn that Sinope, the wealthiest and most important of all the seaports on the southern shore of the Euxine, also struck a prolific series of these coins in both gold and silver.

It is unnecessary here to dilate upon the great commercial importance of Sinope during the fourth and third centuries B. C. That has been brought out with sufficient clearness by Mr. David M. Robinson in his interesting and valuable work "Ancient Sinope," to which I would refer the reader for specific details. Sinope, with her splendid double harbor, the finest in all this region, the terminus of transcontinental caravan routes from Persia and Mesopotamia, and with her fortunate situation at the narrowest portion of the Black Sea (an important consideration to ancient navigators) naturally enjoyed the closest commercial relations not only with all the aforementioned cities of the Euxine but also with Byzantium, Chalcedon, Rhodes, Delos, Athens, and southwards to Egypt. Now all Black Sea cities, together with Byzantium and Chalcedon, were at this time coining heavily,— principally gold staters and silver tetradrachms either with the well known types of Alexander the Great or with the later but little less popular types of Lysimachus. It is therefore strange to observe that numismatists have been quite content to believe that Sinope, one of the wealthiest and most powerful of them all, struck only some very rare tetradrachms and didrachms of purely local types. These have been assigned (Hist. Num.[2] p. 508, and Rec. Gen. pp.192-3) to the end of the third century, that is, after 220 B. C. Likewise these same authorities have assigned the earlier local issues of the Persian drachm, half and quarter drachms to the end of the fourth century (circa 322-306 B. C.), and the succeeding issue of two small denominations to 306-290 B. C. Thus there is left in the Sinopean coinage a gap of some fifty years, either entirely

unfilled or only very inadequately provided for if we should assume that the dates given by such experienced numismatists as Head and M. Babelon are incorrect and that these autonomous coinages were really of longer duration. We may not take such liberties, however, because their assignments are based on the incontrovertible evidences of style against which mere assumptions are worthless. In other words, after the first decade of the third century B. C. down until towards the last quarter of that century Sinope does not seem to have struck any coins of local types. As Sinope would have found it very difficult and also unprofitable at this time to have been without any coinage of her own, we may feel sure that she followed the lead of the cities with whom she was then trading and coined extensively on the Alexander type. In corroboration of this suggestion we find at our disposal a large series of staters, tetradrachms and drachms bearing the name and types of the long dead Alexander, and having also special symbols and letters which can only be interpreted as belonging to the Sinopean mint. Had it not been for the unfortunate fact that L. Müller, in his monumental work on the coinages of Alexander the Great,[1] has assigned these particular varieties on insufficient and even impossible grounds to Sidon, the perfectly evident fact that they must, instead, belong to Sinope would long ago have been apparent.

Before discussing and explaining the reasons why Müller's attribution, in the present case, must be discarded in favor of a Sinopean origin for the coins, a catalogue of the known varieties, as complete as present circumstances will allow, is necessary. The references and numbers are to Mr. G. F. Hill's article in *Nomisma*, IV, 1909, "Notes on the Alexandrine Coinage of Phoenicia."

FIRST SERIES

1 STATER.

Head of Athene to r. with necklace and triple crested, snake adorned, Corinthian helmet.

ΑΛΕΞΑΝΔΡΟΥ on r. Winged Nike standing to l., holds wreath in outstretched r. and stylis in l. In l. field, APLUSTRE. Beneath, ⋈.

Petrograd, two specimens from same obverse die but different reverse dies. **Plate I.**

2 STATER.

Similar head.

Similar type and inscription. In l. field, APLUSTRE. Beneath, ≷I and ≷A.

Petrograd, three specimens, two of which are from identical obverse and reverse dies. **Plate I.**

[1] L. Müller, "Numismatique d'Alexandre le grand," Copenhagen, 1855.

3 DRACHM.

Youthful head of Heracles to r. in lion's skin.

ΒΑΣΙΛΕΩΣ on l. ΑΛΕΞΑΝΔΡΟΥ on r. Zeus enthroned to l., holds eagle in outstretched r. and sceptre in l. Beneath throne, Σ|. In exergue, ΣΑ.

Newell Coll., Plate I.

SECOND SERIES

GROUP A

4 STATER.

Helmeted head of Athene to r. as on no. 1.

ΑΛΕΞΑΝΔΡΟΥ on r. Winged Nike as on no. 1. In l. field, Α | STAR | ΜΕ | Σ|. Behind Nike, ΑΔ.

Yakountchikoff Coll., Plate I.

5 STATER.

Similar.

Similar. In l. field, STAR | Α | Σ|. Behind Nike, ΛΛ.

Dresden, Plate I.

6 STATER.

Similar.

Similar. In l. field, STAR | Σ|. Behind Nike, Θ.

Petrograd (three specimens struck from one obverse die and two reverse dies), Plate I, 6a and 6b.

GROUP B

7 STATER (Hill no. 38).

Similar, but of later style.

Similar. Stylis, which Nike holds, henceforth has form Χ. Beneath r. hand, STAR. In front, ΕΓΓ |·Σ|. Behind, ΒΔΡ | Ε.

Turin, Plate I.

8 STATER (Hill no. 39).

Similar.

Similar. In front, ΕΓΓ | Σ|. Behind, Ν | Ε.

London (from same obverse die as preceding), Plate I.

9 STATER (Hill no. 40).

Similar.

Similar. In front, ΕΓΓ | Σ|. Behind, Κ | ΣΕ.

London (from same obverse die as nos. 7 and 8), Plate I.

10 STATER (Hill no. 42).

Similar.

Similar. In front, ΚΤ | Σ|. Behind, ΗΗ | ΣΕ.

London (from same obverse die as nos. 7, 8, and 9), Plate I.

11 STATER (Hill no. 41).

Similar. Similar. In front, 𐤁𐤉 | 𐤔. Behind, 𐤔TE.

London, Plate I.

12 TETRADRACHM.

Head of youthful Herakles to r. in lion's skin. ΒΑΣΙΛΕΩΣ on r. ΑΛΕΞΑΝΔΡΟΥ on l. Zeus enthroned to l. holds eagle in outstretched r. and sceptre in l. Above r. arm, APLUSTRE. Beneath r. arm, 𐤔. Beneath throne, 𐤁𐤉 | 𐤔TE.

Newell Coll. (formerly Egger Sale, May, 1912, no. 694), Plate I.

13 STATER (Hill no. 37).

Similar to no. 11. Similar to no. 11. In front, 𐤕𐤕 | 𐤔. Behind, 𐤕𐤀.

London (from same obverse die, now very much rusted and cracked, as no. 11), Plate I.

14 STATER (Hill no. 52).

Similar. Similar. In front, 𐤁𐤓 | 𐤇𐤓 | 𐤔. Behind, 𐤉.

Berlin; London, Plate I. (These two coins were struck from different obverse but identical reverse dies.)

15 STATER (Hill no. 51).

Similar. Similar. In front, 𐤔 | 𐤍. Behind, 𐤉.

Berlin, Plate I. (From same obverse die as the preceding London specimen.)

16 TETRADRACHM (Hill no. 61).

Similar to no. 12. Similar to no. 12. Above r. arm, APLUSTRE. Beneath r. arm, 𐤔. Beneath throne, 𐤅 | 𐤊.

Berlin, Plate I. (This coin was published by Prokesch-Osten, Num. Zeitschr. vol. I, p. 44, no. 165, but monograms were badly drawn.)

17 STATER.

Similar to no. 15. Similar to no. 15. In front, 𐤔 | 𐤀𐤀 | 𐤉. Behind, 𐤁.

Hague, Plate II. (From same obverse die as nos. 14 [London specimen] and 15).

18 STATER (Hill no. 47).

Similar. Similar. In front, 𐤀𐤀 | 𐤔. Behind, 𐤈.

Copenhagen, Plate II.

19 STATER (Hill no. 48).

Similar. Similar. In front, 𐤀𐤌 | 𐤔. Behind, 𐤈.

Petrograd; Berlin, Plate II. (Both from the same reverse die, and both from the same obverse die as no. 18).

20 STATER (Hill no. 50 and perhaps no. 49).

Similar. Similar. In front, K (recut over another monogram) | ≶I. Behind, ΑΜ.

Berlin, Plate II. (From the same obverse die as nos. 18 and 19).

21 STATER (Hill no. 46).

Similar. Similar. In front, ΑΝ | ≶I. Behind, ΦI.

London, Plate II. (From same obverse die as nos. 18, 19, and 20); Newell Coll. (formerly Sir H. Weber Coll.).

22 STATER (Hill no. 45).

Similar. Similar. In front, ≶I | ΔI. Behind, ΦI.

London, Plate II.

23 STATER.

Similar. Similar. In front, ΔI | ≶I. Behind, ΦI.

London, Plate II. (From same obverse die as preceding).

24 STATER (Hill no. 44).

Similar. Similar. In front, ΔI | ≶I. Behind, Σ.

London, Plate II. (From same obverse die as nos. 22 and 23).

25 TETRADRACHM (Hill no. 62).

Similar to no. 16. Similar to no. 16. Above r. arm, APLUSTRE. Beneath r. arm, ≶I. Beneath throne, AN | Σ.

Munich, Plate II.

26 STATER (Hill no. 43).

Similar to no. 24. Similar to no. 24. In front, ΑΑ | ≶I. Behind, Ξ.

London; Berlin, Plate II. (From same obverse and reverse dies. The obverse die is also the same as used for nos. 22, 23, and 24).

27 STATER (Hill no. 54).

Similar. Similar. In front, ⊙Ξ | ≶I. Behind, ΜΗ.

London, Plate II.

28 STATER (Hill no. 53).

Similar. Similar. In front, ≶I | Ξ. Behind, ΜΗ or MI.

London, Plate II; Petrograd. (Struck from same obverse and reverse dies. The obverse die is also the same as used for no. 27).

29 TETRADRACHM (Hill no. 59).

Similar to no. 25. Similar to no. 25. Above r. arm, APLUSTRE. Beneath r. arm, ≶I. Beneath throne, Μ.

London.

30 TETRADRACHM (Hill no. 58).

Similar. Similar. Above r. arm, APLUSTRE. Beneath r. arm, ≶I. Beneath throne, E.

London.

31 TETRADRACHM (Hill no. 60).

Similar. Similar. Above r. arm, APLUSTRE. Beneath r. arm, ≶I. Beneath throne, ⋔ | MH.

London. (From the same obverse die as preceding.)

32 TETRADRACHM.

Similar. Similar. Above r. arm, APLUSTRE. Beneath r. arm, A | ≶I. Beneath throne, ⋔ | MH.

Hague (no. 369).

33 TETRADRACHM.

Similar. Similar. Above r. arm, APLUSTRE. Beneath r. arm, A | ≶I. Beneath throne, ⋔ | ME.

Berlin, Plate II. (Same obverse die as preceding.)

34 TETRADRACHM (Hill no. 64).

Similar. Similar. Above r. arm, APLUSTRE. Beneath r. arm, A | ≶I. Beneath throne, ⋔ | 🜁.

Hague. (Same obverse die as used for nos. 32 and 33.)

35 TETRADRACHM (Hill no. 63).

Similar. Similar. Above r. arm, APLUSTRE. Beneath r. arm, ⋀ | A | ≶I. Beneath throne, 🜁.

Munich.

Of the first series only a few specimens have come down to us. The staters seem to have been marked with a simple Aplustre, or with that symbol and the determining letters ≶I. The silver bear only the letters ≶I.

The second series is fairly well represented in our museums to-day, particularly the gold staters. These are now all provided with the letters ≶I and a Star instead of the Aplustre. The silver tetradrachms have also the letters ≶I, but, instead of the Star, they display the Aplustre. That the silver and gold of the second series are really the issues of one mint is satisfactorily proved by the stater no. 11 and the accompanying tetradrachm no. 12. While the one has a Star for a mint mark and the other an Aplustre, they both have the mint letters ≶I, and the magistrate's signatures ⋈ and ≶TE. The remaining tetradrachms also

display several letters and monograms found on the staters. As Müller has already seen, there can be no doubt but that these coins are all the issues of one and the same mint.

According to Müller the attribution of these pieces to Sidon rests upon the presence of the letters ΣΙ together with the symbols Aplustre and Star. There can be no question but that ΣΙ represent the initial letters of the mint name, for with the exception of no. 1, they occur on every coin throughout the entire series. But the evidence presented by these letters is as yet inconclusive as they might with equal probability represent the initial letters of the name Sinope. The Aplustre is in very much the same case. It appears with great frequency on the royal Seleucid issues of Sidon from the reign of Alexander Balas down, and must certainly be considered a symbol of that mint. But it only occurs on Sidonian issues after the year 150 B. C. (tetradrachm dated ΒΞΡ = 151-150 B. C., Rouvier, no. 1227) and therefore it would be almost impossible to force the conclusion that this symbol must necessarily prove the Sidonian orgin of the coins we are at present concerned with. Every consideration of style and fabric show our coins to be at least a hundred years earlier than the Sidonian issues of Balas. On the other hand the Aplustre forms a most conspicuous object on Sinopean autonomous issues (see figs. 1 and 2) as far back as the last half of the fourth



Fig. 1



Fig. 2

century B. C. It is a most obvious symbol for any wealthy sea port whose prosperity rested principally upon its water borne commerce. Strabo even states (xii, 545) that Sinope's fleet dominated the Pontus.

There remains the Star symbol. Fortunately this throws an entirely different light upon the question. So far as the writer is aware the Star symbol never occurs until long after our era, on any coin demonstrably attributable to Sidon.[2] On the other hand the Star does

[2] In the writer's "The Dated Alexander Coinage of Sidon and Ake" the Sidonian Alexander stater no. 1, b bears a star on the obverse within the coils of the snake ornament adorning Athene's helmet. It cannot, therefore, be taken as in any way connected with the mint at Sidon but, because of its position, must be considered simply as an emblem of eternity. In the first century A. D. the star at times appears on the bronze coinages of Sidon, but usually accompanied by a crescent. See the British Museum Catalogue, Phoenicia, nos. 178-188 dated 77 to 88 A. D.; nos. 197-203 dated 116 to 118 A. D.; and no. 212 dated 55 A. D. These coins are of evidently too late a date to have any bearing upon the subject.

occur, and prominently, on the *third* century autonomous issues of Sinope. All specimens of the type illustrated by fig. 2 bear a Star of similar shape and character to the one found on our Alexander staters. Sinope was, in fact, famous in antiquity for its many cults of sidereal divinities. Cults of Helios, Selene, Hydrochoos, and Sirius are well attested to by coins or inscriptions, showing how prominent at Sinope was the worship of the heavenly bodies. A star would therefore be a most appropriate symbol for Sinopean coin issues. In this connection we should also remember that Sinope was strengthened in the eighth century B.·C. by colonists from Miletus, and a star is one of the most conspicuous coin types of the mother city. Therefore, if we once admit that the Star symbol is far more appropriate to a Sinopean than to a Sidonian origin for our Alexander coins, then the Aplustre and the letters ΣΙ associated with it fall naturally into their rightful place as accompanying emblems of Sinope.

We have already called attention to the fact that we have every reason to expect a large coinage of the Alexander type at Sinope in the course of the third century B. C. By contrast it is not only most improbable, but actually impossible, that there should have been such a coinage at Sidon for the same period. A few years ago the writer discussed in detail the entire Alexander coinage attributable to Sidon.[3] It was there shown that this had come definitely to an end by the year 306/305 B. C., its place being taken by an Alexander coinage at Tyre. Later, about 286 B. C., that city went over from Demetrius to Ptolemy I of Egypt[4] and its coinage of Alexander staters and tetradrachms came to a sudden end. For Ptolemy had already, as early as 305 B. C., introduced into his kingdom an entirely new coinage of Phoenician weight and bearing his personal types. Naturally, therefore, he conformed the coinage of his new possessions in Phoenicia with the monetary system now in vogue in Egypt. He retained Tyre as his principal mint in Phoenicia and it was not until during the reign of his son Ptolemy II Philadelphus, that the Sidonian mint was once more reopened after having been shut down ever since 305 B. C. Only coins of Phoenician weight and Ptolemaic types were now struck at this mint (Svoronos, nos. 712-721). These continued to appear yearly (Svoronos, nos. 722-756) until the sixth year of Ptolemy III Euergetes (Svoronos, nos. 1024-1033), and after that time intermittantly until the final capture of the country by the Seleucid king Antiochus III the Great in

[3] E. T. Newell, "The Dated Alexander Coinage of Sidon and Ake," New Haven, 1916.

[4] W. W. Tarn, "Antigonus Gonatas," p. 105.

198 B. C. Thus it is evident that throughout the course of the third century B. C. there is no reason whatsoever to expect to find at Sidon an Alexander coinage with its types and weights so entirely foreign to the monetary system obtaining under the Egyptian domination. In fact ever since the standard of the Egyptian coinage had been reduced by Ptolemy Soter from the Attic to a pseudo-Rhodian (circa 312 B. C.), and then definitely changed to the Phoenician (after 305 B. C.), no coins of Attic weight were ever again struck within the boundaries of the Egyptian possessions. We have no grounds to suppose, then, that Sidon should have formed an exception to this rule.

When Antiochus III secured Phoenicia he again suppressed all the mints in this district except Tyre, which alone was allowed to continue striking silver money. The coins were once more of Attic weight but of purely Seleucid type so as to completely conform with the remainder of that kingdom's coinage. Under Antiochus IV Sidon, as a special privilege, was allowed to strike copper coins but with the portrait of the reigning king. The same is true under the succeeding rulers until we come to Alexander Balas who raised both Sidon and Berytus to the privileges enjoyed by Tyre and allowed the three cities to strike silver money. Sidon henceforth was an active mint of the Seleucid kings coining tetradrachms principally of Phoenician weight, but also at times of Attic weight. It is, however, a purely Seleucid coinage and always displays the portrait of the ruling king. Now the Alexander coins we are at present discussing can hardly be dated as late as the second century B. C.; but if we should be bold enough to set aside all criteria of style it evidently would still be impossible to suppose that Sidon would have been in a position to issue such a series at this time. Throughout she was a *royal* mint and only issued royal Seleucid money bearing purely Seleucid or local types.

The only district along the entire Syro-Phoenician coast that was in a position to strike posthumous Alexander coins after this region had been divided between the Seleucid and the Egyptian kingdoms in the first decade of the third century B. C. was Aradus and her dependent cities Carne and Marathus. But this was by reason of their being free autonomous cities not directly subject to either Syrian or Egyptian domination. Such a status none of the remaining Phoenician towns, Sidon included, at this time enjoyed and so were not in a position to issue coins of the Alexander type. The fact that Aradus actually did issue Alexandrine tetradrachms during the third century B. C. is for us a

most fortunate occurrence. We are thus enabled to determine at a glance that both the Aradian coins and the supposedly Sidonian Alexander coins have absolutely nothing in common in either style or fabric (compare our silver tetradrachms with a typical Alexander tetradrachm of Aradus on Plate II, B). Neither do our coins at all resemble in these particulars any of the third and second century Alexander issues of other Mediterranean cities from Aradus and Aspendus in the south, along the Ionian coast, and so north to the Propontis. The moment, however, that we reach the Euxine and compare our pieces (both gold and silver) with similar coins of the Alexandrine type known to have been struck by various cities in those regions, the close similarity in both style and fabric is at once apparent. Compare our tetradrachms on Plate II with C on that plate which is a tetradrachm of Odessus, or our staters on Plate I with A on the same plate which is a stater of Istrus. The striking similarity points to the fact that our coins are of northern rather than of Phoenician origin. There are in addition two other important points in which our coins resemble the Alexandrine issues of the Euxine districts. The points comprise the unusually heavy issue of gold and the constant presence of the Βασιλεύς title on the silver pieces. None of the late Alexandrine coinages of either Phoenicia or of Asia Minor south of the Propontis possess these characteristics. This being the case the letters ΣΙ, the Aplustre, the Star, and the otherwise surprising lack of an Alexandrine coinage for Sinope all point unmistakeably to that great city as the mint of our series.

In turning to coin finds for a possible confirmation of our new assignment the writer unfortunately knows of only one hoard that would have any bearing upon our subject. This is the famous 'Find of Anadol' minutely described by E. M. Pridik in the Bulletin for 1902 of the Russian Imperial Archaeological Commission. The Anadol hoard contained 11 staters of Philip II, 694 staters of Alexander III, 21 of Philip III, 2 of Demetrius Poliorcetes, 1 of Seleucus I, and 250 (3 being of the Alexander type) of Lysimachus. The hoard itself was unearthed in January 1895 near the little village of Anadol in Bessarabia. Here, as germaine to our subject, we need treat only of the 694 pieces bearing the name and types of Alexander the Great. Of these 65 were struck at Messembria, 19 at Istrus, 102 at Odessus, 230 at Callatis, and 36 at an as yet unidentified mint but probably Tomis, making a total of 452 pieces or considerably more than half from the mints on the west shore of the Euxine. Seeing that such a large proportion of these far trav-

elling coins actually come from the district in which the hoard was unearthed, we might reasonably expect that it would also contain at least a few coins of Sinope, with which seaport the western shore was so closely linked by the ties of commerce. It is pleasing to record that the hoard in question did contain 12 specimens of the staters we would attribute to Sinope. As these twelve specimens consisted only of our varieties nos. 1, 2 and 6, we may deduce the probable fact that the hoard was buried not long after Sinope commenced to strike her Alexander money and before the later and commoner types (our nos. 7-28) had either been issued or had had time to reach the western shore in the course of trade. It is also interesting to note that only one Alexander stater, undoubtedly struck at Sidon, was present in the find, in contrast to the twelve we would attribute to Sinope. The mere fact also that so many examples of only three varieties occurred in this northern hoard greatly strengthens our conclusion that the coins we have here described must be given not to Sidon but to Sinope.



SINOPE, SERIES I, 1-3; SERIES II, 4-16. ISTRUS, A.



SINOPE, SERIES II, 17-33. ARADUS, B. ODESSUS, C.

THE STATE COINAGES OF NEW ENGLAND

THE STATE COINAGE OF CONNECTICUT

By HENRY C. MILLER.

THE COLONIAL COINS OF VERMONT

By HILLYER RYDER.

THE COPPER COINS OF MASSACHUSETTS

By HILLYER RYDER.



PRICE, THREE DOLLARS

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ADDITIONS AND CORRECTIONS

TO

THE STATE COINAGE OF CONNECTICUT

AND

THE COLONIAL COINS OF VERMONT

VOL. LIII (PART I)

ADDITIONS AND CORRECTIONS

TO

THE STATE COINAGE OF CONNECTICUT

Published in The American Journal of Numismatics, Volume LIII, 1920

Since the publication of The State Coinage of Connecticut, several new varieties of Connecticut cents have been discovered. It has been deemed fitting to publish these, and advantage has also been taken at this time to make a number of corrections in the original article.

The Editors are indebted for most of these additions and changes to Mr. Frederick A. Canfield, of Dover, N. J., and to Mr. Hillyer Ryder, of Carmel, N. Y., for perfecting this last work of the late Henry C. Miller.

PAGE

4. 1785 cents. Type 7. No. of dies, change 1 to 2.
4. Add a reverse S to Type 5 of 1786 cents. Make 14 dies instead of 12.
5. 1785 cents. Type K. No. of dies should be 1. With obverse, omit figure 3.
5. 1786. Type D. No. dies, change 4 to 5.
5. 1786. Reverse. Make the following addition:
   Type S INDE: ET - LIB: No. of dies, 1. With obverse, 5.
6. Type 29. With Reverse column should read a^2 instead of aa.
6. Type 32. No. of dies column should read 9 instead of 8.
6. Type 37. No. of dies column should read 15 instead of 14.
6. Type 38. With Reverse column should read GG instead of gg.
6. Type 43. No. of dies column should read 2 instead of 1. With Reverse column should read X, Y.
7. Type X. No. of dies column should read 7 instead of 6. With Obverse column should read 30, 32, 43.
8. Type 12. With Reverse column add F.
9. 1787—Reverse. BB. Description should read ETLIB: (colon, not period).
9. 1788—Reverse. F should read under No. of dies column 2 instead of 1.
9. Type H. A • should be placed before INDE.
9. Type R should be changed to read
   R • INDE • • ET • LIB • 1 4
10. Obverse 3. Var. 1 (R^4) should be added to 3^1—L.

PAGE

11. Obverse 5. Var. 2 is now considered from the same die as Var. 1 but without the die breaks.
11. Obverse 7. Insert Var. 1 to printed description.
11. Var. 2. Similar to Var. 1; heavy break from neck through fillet ends; semicircular termination of breastplate. This is the same die as used in 4^2 of 1786. 7^2—D (R^6)
12. Reverse A. Var. 1. 6—A^1 should read 6^1—A^1.
12. Reverse D. "Four on right" should read "five on right".
13. Reverse K. Var. 1 "Bottom of I double-cut" should read "Bottom of T double-cut".
13. Var. 2 of Reverse K is now conceded to be the same as Reverse B.
14. Obverse 3. Last line, 3—D^5 (R^6) should be inserted.
14. Obverse 4. Add the words "Var. 2" after Obv. 7 in last sentence, as two varieties are now known of this 1785 cent.
15. Var. 2. Line 2. 5^2—L (R^6) should be inserted.
15. Var. 12 should be omitted as it is now considered the same as Var. 2.
15. The following new varieties are to be added:
Var. 13. Both colons incline to the right. Semicircular breastplate. Roman nose. Colons heavy and even. Upper dot of first colon low, and much larger than lower dot. Two dots between forelock and wreath. Serifs of E closed. Milling fine and ragged. 5^{13}—I (R^6)
15. Var. 14. Lower dot of first colon a little below the bottom of I. Bottom dot of second colon even with bottom of C. Colons nearly parallel with letters. Second and third N double-cut. No semicircular breastplate. Three side curls enclose dots. The curved band on armor, under fluting, on throat, tapers into almost a crescent at the ends. Milling fine. 5^{14}—S (R^6)
15. Var. 15. First colon leans to left. Upper dot very low. Lower dot even. Second colon leans to left; lower dot even; upper dot low. Letters in legend wide. A large semicircular break from rim to halfway to top of left shoulder. Surface is slightly swollen. 5^{15}—S (R^6)
17. 1786 Reverse D. Var. 5. This variety is represented by a brass casting which shows that it was recut on the letters IND, and on the milling that touches the tops of all the letters INDE. This piece shows the full device and is so small that it will lie within the milling of D^1. No original copy of this variety is known. 3—D^5 (R^6)
18. Reverse I. Last line. Add 5^{13}—I.
19. Reverse Q. Instead of "Three longitudinal lines on globe", read "There are eight longitudinal lines and three parallels of latitude on globe".

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19. Add Reverse S. INDE: ET-LIB:
Branch is thick with five small short leaves on each side of stem. End leaf about level with the middle of the base of E. Date line double. Fig. 8 touches date line; other figures are near it. Both colons are even and parallel, with upper dots low; about half as high as the adjacent letters, which are very large. Lower dot of last colon half on shield. B touches shield. Branch hand opposite D and space between N and D. The most striking feature of this reverse is a sword hilt and guard under the left elbow of the goddess. They appear to be too well formed, proportioned and located to be due to an accidental break in the die. Combined with 5^{14} and 5^{15}.

23. 1787. Obverse 26. 26—kk^2 should read 26—kk^1.

23. Obverse 27. "Last star high" should read "Last cross high".

24. Obverse 29. Var. 2. "c and o touch head" should read "c and o close to head".

25. Obverse 32. Add Var. 9. First cinquefoil close to point of bust. Second cinquefoil high and distant from period and hair. Third cinquefoil high and nearer c than wreath. Fourth cinquefoil high and near point of toga. Periods even with bottoms of adjoining letters. AUCT close, OR wide, CONNEC wide, with large c's. Second c barely touches hair; second o far from hair. Centers of last cinquefoil and period are in a straight line with lower corner of upper fillet end. 32^9—X^7

26. Var. 4. Line 4. "The lower dot nearer c." should read "The lower dot nearer I".

28. Obverse 33. Var. 16. Not the same die as Var. 14 — the second cinquefoil is lower; the third cinquefoil is more distant from c; two loops of third cinquefoil near hair; lower dot of first colon is one half below I; second cinquefoil is nearer I than is the case on 33^{14}.

30. Var. 29. "First cinquefoil entirely under bust" should read "First cinquefoil to left of bust".

31. Var. 37. Last line. Add 33^{37}—Z^{11} (R^6).

32. Var. 38. Last line. Add 33^{38}—Z^{18} (R^6).

35. Var. 14. First line. Add the word "second" before "slightly distant".

35. Add Var. 15. First fleuron small and close to left of bust. Second fleuron near hair. Third fleuron close to head, near to c, and distant from wreath. Fourth fleuron opposite space between dots of last colon — near colon and toga. First colon leans to the right — lower dot near I. Second colon parallel with c. R high. Letters widely and evenly spaced. All the c's are almost closed. 37^{15}—h^3 (R^6)

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36. Obverse 43. Add Var. 1 to description, and add Var. 2, as follows: This is a "CONNFC" and was struck from the die before the F was changed to E and became 32^3. The burr that was raised by the F and C punches is plainly visible on the coin; it was removed before the altered die was used. 43^2—X^4 (R^6)

37. Obverse 50. First line. Change word "colon" to "period".

37. Obverse 52. Inscription should read: AUCTORI CONNEC. Its rarity is 6.

40. Reverse W. Var. 1. The combination should read 33^3—W^1.

40. Var. 4. Last line. Change word "cinquefoil" to "shield".

41. Reverse X. Var. 1. Second line "colon" should read "period" in each case.

41. Var. 4. Last line. "Colon" should read "period." Combination should read 32^2—X^4. 32^3—X^4. 43^2—X^4.

41. Var. 5. Last line. Change "colon" to read "period".

41. Var. 7. First cinquefoil is distant a little more than its own width from skirt of goddess. The next to the last cinquefoil is high and is half as far from pole as from hair. The last cinquefoil is far from B and near shield. Last period is very weak and close to shield. ETL are close, LIB are wide. Uprights of E and T lean to left. Tops of both letters are long. The upper "hole" of B is double the size of the lower "hole". The date-line is double and unbroken. Both 7's are low. Top of 8 laps on lower line. A long lock of hair floats downward and to the right from the back of the neck. The upper ribbon does not reach the pole; its triangular right hand end resembles the head of a snake. The lower ribbon is in high relief and crosses in front or outside of the pole. It looks somewhat like a horizontal break in the die. 32^9—X^7 (R^6)

42. Var. 4. Next to last line. Word "connected" should read "corrected".

42. Var. 6. Fourth line. Word "printing" should read "pointing".

43. Var. 11. Add to combination, 33^{37}—Z^{11}.

44. Var. 13. Add to combination, 33^{21}—Z^{13}.

45. Var. 18. Add to combination, 33^{38}—Z^{18}.

45. Var. 20. Combinations should read 33^{28}—Z^{20}. 33^{39}—Z^{20}.

45. Var. 21. The second combination should read 33^{12}—Z^{21} instead of 38^{12}—Z^{21}.

47. Reverse g. Var. 5. "upper left" should read "upper leaf".

47. Reverse h. Add Var. 3 — Ornament low, and on same curve as bottom of letters INDE. Second cross midway between pole and plume. N a little nearer to D than to I; I leans to left. Colons parallel with adjacent letters. Upper dot of second colon low; the other dots are normal. Lower date-line cuts top of figure 8. 37^{15}—h^3

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48. Reverse k. Var. 3. First combination should read 34—k^3 instead of 34—K^3.
51. Reverse gg. Var. 1. Read 33^{20}—gg^1 instead of 33^{20}—gg^1.
52. Reverse BB. A colon should follow ETLIB: instead of a period. Second line should read "Lower dot of colon on shield" instead of "Period close to shield".
53. Reverse RR. 37^7—RR should read 37^1—RR.
54. Obverse 4. Add new combination, 4^1—B^2.
55. Obverse 7. 7—F should read 7—F^2.
55. Obverse 12. 12^1—F should read 12^1—F^1.
57. Obverse 16. Var. 4. Second line. "Colon" should read "period". Third line. "C touches head" should read "C does not touch head".
57. Var. 6. Last line. "Colon" should read "period".
57. Reverse B. Var. 2. Add combination, 4^1—B^2.
58. Reverse C. Third line. "Cinquefoil" should read "star".
58. Reverses E and H. On some copies the last line of these two reverses were transposed. Correct reading for Reverse E — "Narrow with small leaves." Coarse milling. 7—E. 9—E. 12^1—E. 12^2—E
58. Reverse F. Place "Var. 1" before description, and make combination read 12^1—F^1.
58. Var. 2 to be added — Branch is a wheat ear — defective. Second star low and nearer to head than to T. First E double-cut. Curve of D is heavy. Top of I is long. Ends of date-line are near milling; milling blunt. Tops of figs. 1 and 7 are below date-line and near milling. Figs. 88 lean to right and are near milling. Head and hair very crude. Break from top of head through wrist to bottom of B. 7—F^2 (R^6)
58. Reverse H. Last line should read — Curve of shield and from last cinquefoil to milling. 6—H. 16^1—H. 16^5—H. 16^6—H
59. Reverse R. A complete description can now be given — Branch is a wheat ear and ends between D and E. Branch-hand is near lower right corner of N. Letters small and wide apart. N leans away from I. D and E high. T leans away from E. B low and near bottom of shield. Top line of D not parallel with bottom line. First star is very low and about midway from I to foot of goddess. Second star high and nearer forelock than to E. Third star very high and indistinct. Fourth star midway between T and L. Last star very near date-line and lower curve of shield. Fig. 1 is small — very low and distant from fig. 7, which is large. Last 8 touches date-line, which is single. All the figures lean to the right. Breaks in rim under the date. Milling crude and irregular. The legend by Hall is correct:

* INDE * * ET * LIB *

THE COLONIAL COINS OF VERMONT

CORRECTIONS AND ADDITIONS

No.

11 *Obv.* The period after colon in legend was probably not intentional, but caused by a die break.

13 *Rev.* BRITAN NIA. Period after legend.

14 1787. The obverse is from the same die as Nos. 20, 21, 22 and 23 of 1788. Small wart on bridge of nose.

16 *Obv.* N distant from hair. A is imperfect.

17 1788. Crosby's 1—A. Mailed and laureated bust facing right,

VERMON AUCTORI

N almost touches hair, A is perfect.

Rev. From same die as No. 16. Branch hand points to upright of D. Single line above and touching all figures of date. (R^3)

32 1787. Crosby's 1—A. Mailed and laureated bust facing right,

VERMON AUCTORI

N touches hair, I close to and just under bust.

Rev. From same die as No. 12. (R^6)

A specimen from the Whipple Collection was sold by Mr. Elder, Feb. 23, 1921. Had this variety been known when the list of Vermont Coins was compiled, it would have been listed as No. 13, advancing all subsequent numbers.

THE
STATE COINAGE OF CONNECTICUT

DESCRIPTIVE LIST OF VARIETIES

By HENRY C. MILLER

Collectors of American Colonial coins have found considerable difficulty in arranging the copper issues of the State of Connecticut for the years 1785 to 1788. Mr. Crosby's "Early Coins of America," published in 1875, contains a partial list of types, and Dr. Hall in 1892 furnished a description of the then known varieties and combinations of the year 1787. Their work, excellent as far as it goes, only partly covers the ground. Some corrections and changes are called for and new material has resulted from later researches.

At the request of many collectors it has been decided to publish the present revised catalogue of varieties. The object is twofold: first, to furnish a detailed description, as nearly complete as possible, of all known dies and their combinations; second, to simplify and systematize the arrangement so that any specimen may be readily placed. Wherever available free use has been made of the data given by Crosby, Hall and Hays, and valuable assistance has been rendered by other numismatists. Especial acknowledgments are due to Messrs. Frederick A. Canfield of Dover, N. J., Hillyer Ryder of Carmel, N. Y., David Proskey of New York City, and Dr. Geo. R. Ross of Lebanon, Pa.; also to Howland Wood of the American Numismatic Society for important aid in preparing the list for publication.

In the year 1739 a petition was presented by John Read of Boston to the Governor and General Court at New Haven, asking aid in procuring a patent from the Crown to coin copper for circulation in Connecticut. It is conjectured that this application had some connection with the operations of John Higley of Granby, who, without official authority, for several years had been coining copper three-pence on his own account. No action appears to have been taken in regard to this petition and for nearly half a century the currency of Connecticut consisted almost entirely of depreciated paper with a scanty supply of English half-pence.

By act of the General Assembly of Connecticut in October, 1785, authority was granted to Samuel Bishop, Joseph Hopkins, James Hillhouse and John Goodrich to establish a mint for the manufacture of copper coins. The dies were made by Abel Buel of New Haven, but unauthorized issues of light weight and inferior workmanship circulated freely together with the legalized coins. The historic details in regard to the Connecticut coinage are given at length in Crosby's "Early Coins of America."

One general design was employed for the entire four years.

Obverse — Laureated head with bust either mailed or draped.
Legend — AUCTORI CONNEC

Reverse — The goddess of Liberty, seated, facing left, an olive branch in her right hand, staff surmounted by liberty cap in her left.
Legend — INDE ET LIB
Date in exergue. Borders milled or serrated. Edges plain.

The coins of Connecticut vary greatly in weight. Specimens are found weighing not more than 108 grains, while others range from 168 to 184 grains. In some cases the lighter coins are probably counterfeits of the time, but many of light weight, undoubtedly authentic, are from the same dies as the heavier ones. In fact the weight and character of the planchet seems to have been regarded of little importance.

Overstrikes are frequent, resulting sometimes in a curious mixing of legends. For this purpose the Nova Constellatio and New Jersey issues appear to have been especially favored.

Owing to the scarcity of Coppers in the Colonial period from 1783 to the establishment of the United States mint, the country was flooded with a quantity of counterfeit and light weight British half-pence. Some of these were sent from abroad, but the close resemblance of others to the Connecticut coins is fairly conclusive evidence that many of these half-pence were struck in that State. As the legends on these pieces bear no reference to Connecticut they are not included in this list. On the other hand no attempt has been made to decide on the legality of any of the coins with the legend AUCTORI CONNEC. They were all made at the same epoch, some by fairly competent hands, others evidently by novices in die-sinking.

According to our list the number of dies is as follows: Obverse 199, Reverse 186. Of 1785 there 21 obverse and 20 reverse dies; of 1786, 21 obverse and 20 reverse; 1787 affords the greatest number, 129 obverses and 124 reverses, while 1788 gives us only 28 obverses and 20

reverses. In this enumeration Crosby's obverses 23 and 35 are not included. No authentic specimens of these numbers have been located, and it is altogether probable that his descriptions of them were made from worn or imperfect pieces of other types. As the evidence against them is of course purely negative, these numbers have been retained for the present in the type-tables, but excluded from the list of combinations.

On account of the marked differences in punctuation and in the ornamental devices on many of the dies, together with the curious blunders in the spelling of the legends, this series affords a fertile and most interesting field for the collector of varieties.

It has seemed best, as far as possible, to retain the obverse types of Crosby and Hall, but a simpler method of denoting the reverses has been adopted. Obverse varieties of types 33 and 37 of 1787 evidently were numbered by Dr. Hall mostly in the order in which he found them. As these varieties are numerous it requires more patience than most collectors possess to locate a specimen according to Hall's list. It is believed that the more systematic method here employed will render the task much easier.

The question of rarity is one that admits of some difference of opinion. The degrees given by Crosby in many cases require modification. From the personal examination of many thousands of coins and the conclusions of active collectors it may be assumed that the estimates here given are approximately correct. Varieties marked C, R^1 and R^2 may generally be procured in good condition; those of R^3, R^4 and R^5 are much harder to find, while specimens of R^6, even when poor, are seldom obtainable. In fact a number of the varieties of R^6 are described from a single piece, the only one known. So many of the Connecticuts were weakly and imperfectly struck that really fine, well-centered pieces of all but a very few of the types are decidedly rare.

While the table of combinations is the most comprehensive one yet published it is, of course, possible that from time to time a few additional mulings may be found. Such pieces may safely be considered of the highest rarity.

For the convenience of those familiar with Dr. Hall's descriptions his corresponding numbers of 1787 are given in parallel columns.

TABLE OF TYPES

1785 — OBVERSE

Type	Head Facing	Legend and Punctuation		No. of Dies	With Reverse
1	Right	AUCTORI.	CONNEC.	1	E
2	"	AUCTORI : (Lower dot of 1st colon clear of head)	CONNEC :	2	A
3	"	AUCTORI : (Lower dot of colon close on head)	CONNEC :	5	A, B, F, L
4	"	AUCTORI : (Lower dot of colon partly on head)	CONNEC :	4	A, C, D, F
5	"	AUCTORI : (Lower dot of colon half on head)	CONNEC :	2	F
6	"	AUCTORI : (Colon and I part on head)	CONNEC :	5	A, F, G, I, K, M
7	Left	AUCTORI	CONNEC	1	D
8	"	AUCTORI :	CONNEC :	1	D

1786 — OBVERSE

Type	Head Facing	Bust	Legend and Punctuation		No. of Dies	With Reverse
1	Right	Mailed	AUCTORI	CONNEC	1	A
2	"	"	AUCTORI •	CONNEC •	2	A, D
3	"	"	AUCTORI :	CONNEC :	1	D
4	Left	"	AUCTORI	CONNEC	2	G, R
5	"	"	AUCTORI :	CONNEC :	12	B, C, F, G, H, I, L, M, N, O, P, Q, R
6	"	Draped	AUCTORI :	CONNEC :	1	K
7	"	"	AUCTORI : ✱	✱ CONNEC : ✱	1	K
8	"	Mailed	UCTORI :	CONNNEC :	1	O

1785 — REVERSE

Type	Legend and Punctuation		No. of Dies	With Obverse
A	INDE :	ETLIB :	4	2, 3, 4, 6
B	INDE : ✣	ETLIB :	1	3
C	INDE : ✣ ✣	ETLIB :	1	4
D	INDE : ·✣·	ETLIB :	1	4, 7, 8
E	INDE . ·✣· ·✣·	ETLIB . ·✣·	1	1
F	INDE : ✣	ETLIB :	5	3, 4, 5, 6
G	INDE : ✣ ✣	ET LIB :	2	6
H	INDE : ✣	ET · LIB :	3	4, 5
I	INDE : ✣	ETLIB :	1	6
K	INDE : ✣	ETLIB :	2	3, 6
L	INDE : ✣	ETLIB :	1	3
M	INDE : ✣	ET LIB ✣	1	6

1786 — REVERSE

Type	Legend and Punctuation		No. of Dies	With Obverse
A	ET LIB	INDE	1	1, 2
B	INDE	ET LIB	2	5
C	INDE	ET LIB :	1	5 (?)
D	INDE .	ET LIB .	4	2, 3
E	INDE : ✣	ET LIB :	1	5 (?)
F	INDE . -✣-	ET LIB :	1	5
G	INDE : -✣-	ET · LIB :	1	4, 5
H	INDE :	ET · LIB :	2	5
I	INDE : ✣	ET · LIB :	1	5
K	-✣- INDE : -✣-	-✣- ET - LIB :	1	6, 7
L	INDE : ✣	ET - LIB :	1	5
M	INDE ✣	ET LIB	1	5
N	INDE : - -✣- -	ET · LIB :	1	5
O	INDE : · ✣ ·	ET LIB :	2	5
P	INDE :	ET - LIB :	1	5
Q	INDE : -●	ET - LIB :	1	5
R	INDE : ✣	ET - LIB :	1	4, 5

1787 — OBVERSE

Type	Head Facing	Bust	Legend and Punctuation	No. of Dies	With Reverse
1	Right	Mailed	AUCTORI — CONNEC	4	A, C, L, VV, WW
2	Left	"	AUCTORI — CONNEC	1	B
3	"	"	AUCTORI — CONNEC •	1	G
4	"	"	AUCTORI • — CONNEC •	1	L
5	"	"	• AUCTORI • — • CONNEC	1	P
6	"	"	• AUCTORI • — • CONNEC •	2	M
7	"	"	AUCTORI : — CONNEC :	1	I
8	"	"	AUCTORI : ⁘ — ⁘ CONNEC : ⁘	1	N, O
9	"	"	× AUCTORI + — × × CONNEC ×	1	D, E, R
10	"	"	+ AUCTORI × × — + + CONNEC +	1	E
11	"	"	✱ AUCTORI ✱ — ✱ CONNEC ✱	3	E, K
12	"	"	AUCTORI. ✱ — CONNEC ✱	1	Q
13	"	"	AUCTORI ✱ — ✱ CONNEC ✱	1	D
14	"	"	➔ AUCTORI ➔ — ➔ ➔ CONNEC. ➔	1	H
15	"	"	✱ AUCTORI ✱ ✱ — ✱ ✱ CONNECT ✱ ✱	1	F, R, S
16	"	Draped	AUCTORI : — CONNEC :	6	l, m, n, p, u, NN
17	"	"	AUCTORI : — - + - CONNEC :	1	g
18	"	"	AUCTORI : + — + CONNEC	1	g
19	"	"	AUCTORI : + — + CONNEC :	1	g
20	"	"	AUCTORI : ✱ — ✱ CONNEC :	1	a
21	"	"	AUCTORI : × — - + - CONNEC : ×	1	DD
22	"	"	AUCTORI : ✱ — + CONNEC : ×	1	g
23	"	"	AUCTORI : + - — - + - CONNEC : - + -	?	?
24	"	"	- + - AUCTORI : — - + - CONNEC :	1	g, FF
25	"	"	✲ AUCTORI : × — ✲ CONNEC :	1	b, m
26	"	"	✱ AUCTORI : — × CONNEC : ✱	1	a, kk, AA
27	"	"	+ AUCTORI : × — × CONNEC : ×	1	a
28	"	"	AUCTORI : ✱ — ✱ CONNEC :	1	m, n, o
29	"	"	AUCTORI : ✱ — ✱ CONNEC : ✱	2	N, n, o, p, aa
30	"	"	AUCTORI : ✱ — ✱ CONNEC : ✱	1	X, hh
31	"	"	✱ AUCTORI : ✱ — ✱ CONNEC :	2	r, gg
32	"	"	✱ AUCTORI . ✱ — ✱ CONNEC . ✱	8	X, Z, aa
33	"	"	✱ AUCTORI : ✱ — ✱ CONNEC : ✱	45	T, W, Z, l, q, r, s, ff, gg, hh, II, KK, SS
34	"	"	AUCTORI : ➔ — ➔ CONNEC : ➔	2	k, ff
35	"	"	AUCTORI : ➔ — ➔ CONNEC : ➔	?	
36	"	"	➔ AUCTORI : ➔ — ➔ CONNEC :	1	k, l, ff
37	"	"	➔ AUCTORI : ➔ — ➔ CONNEC : ➔	14	B, e, h, i, k, cc, ff, HH, LL, RR, TT
38	"	"	AUCIORI : — + CONNEC : ×	1	l, gg
39	"	"	➔ AUCTOBI : ➔ — ➔ CONNEC : ➔	2	h, ee, ff
40	"	"	AUCTOPI ✱ — ✱ CONNEC	1	N, kk
41	"	"	✱ AUCTOPI : ✱ — ✱ CONNEC :	1	ii
42	"	"	✱ AUCTOPI : — ✱ CONNEC . ✱	1	o, kk
43	"	"	✱ AUCTORI . ✱ — ✱ CONNFC . ✱	1	Y
44	"	"	✱ AUCTORI : — ✱ CONNEC : ✱	1	W, Z
45	"	"	- × - AUCTORI : - + - — - × - CONNEC : - + -	1	CC
46	"	"	✱ AUCTORI : × - — - × - CONNEC : - × -	1	BB
47	"	"	✲ AUCTORI : - × - — - × - CONNEC :	1	a
48	"	"	➔ AUCTORI : ➔• — •• ➔ CONNEC : ➔	1	g
49	"	"	✱ AUCTORI : ✱ — ✱ ✱ CONNEC : ✱	1	Z

1787 — REVERSE

Type	Legend and Punctuation		No. of Dies	With Obverse
A	ETLIB	INDE	1	1
B	INDE ET	LIB	1	2, 37
C	INDE • ET	LIB	1	1
D	+ INDE + ET + +	+ + LIB + +	1	9, 13
E	✱ INDE ✱ ET ✱	✱ LIB ✱ ✱	1	9, 10, 11
F	✱ INDE ✱ ET ✱ ✱	✱ LIB ✱ ✱	1	15, 50, 55
G	INDE ✱ ET	LIB ✱	1	3, 52
H	INDE • ET	LIB.	1	14
I	INDE : ⁘	ET LIB.	1	7
K	✱ INDE ✱	✱ ET LIB ✱	1	11
L	INDE •	ET • LIB •	1	1, 4
M	INDE : ✱ ✱	✱ ET • LIB :	1	6
N	INDE ✱ ✱	✱ ETLIB ✱	1	8, 29, 40
O	✱ INDE : ✱ ✱	✱ ETLIB : ✱	1	8
P	• IN DE •	ET LIB •	1	5
Q	✱ IN DE •	ETLIB • ✱	1	12
R	+ IND × × + ET +	× + + LIB + + ×	1	9, 15
S	✱ INDL ✱ ET ✱	✱ LIB ✱	1	15
T	✱ INDE : ✱ ✱	✱ ETLIB : ✱	2	33
V	✱ INDE . ✱ ✱ ✱	✱ ET LIB •	?	?
W	✱ INDE : ✱ ✱ ✱	✱ ETLIB :	6	33, 44
X	✱ INDE . ✱ ✱ ✱	✱ ETLIB . ✱	6	30, 32
Y	✱ INDE . ✱ – ✱ – ✱	✱ ETLIB . ✱	1	43
Z	✱ INDE : ✱ ✱ ✱	✱ ETLIB : ✱	24	33, 44, 49
a	× INDE : – + – – + –	– + – ETLIB :	3	20, 26, 27, 29, 47
b	× INDE : – + – – + –	+ – ETLIB :	1	25
c	+ – INDE : – + – – + –	– + – ETLIB :	?	?
d	✱ INDE : +	+ ETLIB :	?	?
e	+ INDE : ⋘	+ ETLIB :	1	37
f	– + – INDE : + +	– + – ET – LIB :	?	?
g	– + – INDE : – + – – + –	– + – ET – LIB :	5	17, 18, 19, 22, 24, 48
h	+ INDE : ⋘	× ET – LIB :	2	37, 39
i	+ INDE : ⋘	// ET – LIB : ×	1	37
k	// INDE : ⋘	// ET – LIB :	5	34, 36, 37
l	⋘ INDE : ⋘	⋘ ET – LIB : ⋘	2	16, 33, 36, 38
m	✱ INDE ✱ ✱	✱ ET – LIB ✱	1	16, 25, 28
n	✱ INDE : ✱ ✱	✱ ET – LIB :	1	16, 28, 29
o	✱ INDE ✱ ✱	ETLIB ✱	1	28, 29, 42
p	✱ INDE ✱ ✱	✱ ETLIB ✱	1	16, 29
q	INDE : ✱ ✱ ✱	✱ ETLIB : ✱	1	33
r	✱ INDE : ✱ ✱	✱ ET LIB :	5	31, 33
s	✱ INDE : ✱ ✱	✱ ET – LIB : ✱	2	33
u	✱ INDE ✱ ✱	✱ ETLIB	1	16
aa	✱ FNDE . ✱ ✱ ✱	✱ ETLIB . ✱	1	32
bb	× INDE : – + – – + –	– + – ETLIR :	?	?
cc	// INDE : ⋘	// ET-LIR :	2	37
dd	⋗⋖ INDE : ⋘	⋖ ET-LIR : ⋖	?	?
ee	⋗⋖ INDE : ⋘	⋗⋖ ET-LIR :	1	39
ff	⋘ INDE : ⋘	⋘ ET-LIR : ⋖	2	33, 34, 36, 37, 39
gg	✱ INDE : ✱ ✱	✱ ETLIR : ✱	2	31, 33
hh	✱ INDE : ✱ ✱ ✱	✱ ETLIR : ✱	2	30, 33

1787 — OBVERSE

Type	Head Facing	Bust	Legend and Punctuation		No. of Dies	With Reverse
50	Left	Draped	● AUCTORI . ●	● CONNLC . ●	1	F
51	"	"	Same as 29[2]			
52	Right	Mailed	AUCTORI	CONNEC .	1	G
53	Left	Draped	➔ AUCTORI : ➔	➔ CONNEC : ➔	1	FF
54	"	"	Same as 21			
55	"	Mailed	● AUCTORI . ●	● CONNEC . ●	1	F

1788 — OBVERSE

Type	Legend and Punctuation		No. of Dies	With Reverse
1	AUCTORI	CONNEC	1	I
2	✱ AUCTORI •	CONNEC ✱	1	D
3	✤ AUCTORI ✱	✱ CONNEC ✱	2	B
4	AUCTORI · ✱	✱ CONNEC ✤	2	B, K, R
5	✱ AUCTORI ✱	✱ CONNEC ✤	1	B
6	AUCTORI ✱	✱ CONNEC ✱	1	H
7	✱ AUCTORI ✱	✱ CONNEC ✱	1	E, F, K
8	AUCTORI. ●	CONNEC ●;	1	K
9	AUCTORI	CONNEC ✱	1	E
10	AUCTORI ✱	✱ CONNEC ✱	1	C
11	✱ AUCTORI	✱ CONNEC ✱	1	G
12	✱ AUCTORI ✱	✱ CONNEC ✱	2	C, E
13	● AUCTORI ●	● CONNLC ●	1	A
14	● AUCTORI ●	● CONNEC ●	2	A, L
15	● AUCTORI ●	● CONNEC. ●	2	L, P
16	● AUCTORI. ●	● CONNEC. ●	6	D, H, L, N, O
17	● AUCTORI. ●	● CONNLC. ●	1	O, Q

1787 — REVERSE

Type	Legend and Punctuation	No. of Dies	With Obverse
ii	✱ INDE : ✱ ✱ ✱ ETIIB :	1	41
kk	✱ INDE : ✱ ✱ ETIIB : ✱	2	26, 40, 42
AA	✱ INDE : + – + + ETLIB :	1	26
BB	× INDE : + – + – + ETLIB •	1	46
CC	+ INDE : – ✱ – ✱ – – + – ET LIB :	1	45
DD	– + – INDE : + – + – – + – ET-LIB :	1	21
EE	✱ INDE : ✱ – ✱ – – ✱ ET-LIB : ✱	1	33
FF	– + – INDE : + + + ET-LIB :	1	24, 53
GG	– + – INDE : – + = + – – + – ET-LIB :	1	38
HH	✱ INDE : ✱ ✱ ✱ ET-LIB : ✱	1	37
II	✱ INDE : ✱ ✱ ✱ ETLIB ✱	1	33
KK	✱ INDE : ✱ ✱ ✱ ET LIB : ✱	1	33
LL	✱ INDE : ✱ ✱ ✱ ET • LIB : ✱	1	37
NN	✱ INDE : ✱ ✱ ✱ ET • LIB :	2	16
RR	✱ INDE : ✱ ✱ ✱ ET-LIB : ✱	1	37
SS	✱ INDE : ✱ ✱ – ✱ ET • LIB : ✱	1	33
TT	– ✱ – INDE : ✱ ✱ – ✱ – ETLIB : ✱	1	37
VV	INDE ETLIB •	1	1
WW	ET LIB INDE •	1	1

1788 — REVERSE

Type	Legend and Punctuation	No. of Dies	With Obverse
A	✱ INDE ✱ ET ✱ ✱ ✱ LIB ✱	2	13, 14
B	INDE ✱ ET LIB ✱	2	3, 4, 5
C	INDE ✱ ET LIB ✱	1	10, 12
D	INDE ✱ ET ✱ LIB ✱	1	2, 16
E	INDE ✱ ET ✱ ✱ LIB ✱	1	7, 9, 12
F	INDE ✱ ET ✱ ✱ LIB ✱	1	7, 12
G	INDE ✱ ET ✱ ✱ LIB ✱	1	11
H	INDE. ✱ ✱ ✱ ETLIB. ✱	1	6, 16
I	INDE × ET • LIB ×	1	1
K	✱ INDE ✱ ET ✱ LIB ✱	1	4, 7, 8
L	✱ INDE • ET ✱ ✱ LIB. ✱	2	14, 15, 16
M	INDE • ET ✱ ✱ LIB. ✱	?	?
N	✱ IN DE. ✱ ✱ ✱ ETLIB. ✱	1	16
O	✱ INDL. ET ✱ ✱ ✱ LIB. ✱	1	16, 17
P	✱ INDE • ET ✱ ✱ ✱ LIB. ✱	1	15
Q	✱ INDE • ET ✱ ✱ LIB. ✱	1	17
R	× INDE ✱ ✱ ET ✱ LIB ✱	1	4

DESCRIPTIVE LIST OF VARIETIES

1785 OBVERSE

Types 1 to 6 have mailed bust facing right.

Obverse 1.

AUCTORI. CONNEC.

Fillet-ends long, ending between the bust and the legend. 1—E (R^4)

Obverse 2.

AUCTORI : CONNEC :

Lower dot of colon clear of head. Both fillet-ends point at A.
2—A^1 (R^3). 2—A^4 (R^3)

Obverse 3.

AUCTORI : CONNEC :

Lower dot of colon very close to or touching head.

Var. 1. A single sprig from near top of front leaf turns back over forehead. Depression over cheek. Upper curved line of mail ends abruptly at lower left corner and does not connect with inner line. Five dots below upper curved line. Four dots on mail above breast. 3^1—A^3 (R^3). 3^1—L

Var. 2. A single sprig from near top of upper front leaf is joined by a second, both terminating in a prominent berry on forehead. T slopes to right, its top above adjoining C. I low. The curved lines of the mail at lower left corner form a rounded extremity. Lower curved line double. 3^2—L (R^3)

Var. 3. Two sprigs from top leaf arch over forehead. Colons heavy. Last colon close to C and low. 3^3—F^3 (R^4)

Var. 4. A single sprig from top leaf branches over forehead, arching backward, the upper termination heavy and connecting with top of front leaf. Both colons low, the dots smaller than in var. 3. At lower left corner the mail ends in a sharp point.
3^4—F^1 (R^3). 3^4—F^2 (R^3)

Var. 5. Four hair locks emerge from upper front leaf, uniting over forehead. Top of T above that of C. A line joins T and O at top. Letters of CONNEC irregular with EC low 3^5—B (R^2)

Obverse 4.

AUCTORI : CONNEC :

Lower dot of colon partly on head.

Var. 1. Head and legend very large. Lower fillet-end near A. AU widely spaced. Last colon much nearer to C than to mail. Hair brushed downward. The usual variety of the Negro Head. 4^1—F^4 (R^1)

Var. 2. Similar to var. 1, but hair brushed back. Lower dot of last colon heavy. The rare variety of the Negro Head. 4^2—F^4 (R^6)

Of this variety only one authentic specimen is known.

Var. 3. Lower fillet-end distant from A. AUCTORI closely spaced. Hair brushed back, forehead receding. Last colon midway between C and mail. Break from lower left corner of mail. 4^3—A^2 (R^3). 4^3—D (R^4)

Var. 4. Four hair locks from upper front leaf unite in a prominent berry over forehead. Mail at lower left corner has rounded extremity. Long pointed nose, lips thick. Upper fillet points between A and U. EC low. 4^4—C (R^4). 4^4—D (R^4)

Obverse 5.

AUCTORI : CONNEC :

Lower dot of colon half on head.

Var. 1. Lower fillet-end distant from A, upper one rather close to U. AUC closely spaced. Lower dot of last colon slightly below line of C. C in CONNEC closed. Neck large and badly shaped. Two oblong die-breaks between chin and bust. 5^1—F^5 (R^4)

Var. 2. AUC more widely spaced than in var. 1. Upper fillet-end further from U. Lower dot of last colon below line of C. Colons further from I and C than in var. 1. Period-like dot in field between upper part of mail and last colon. 5^2—F^5 (R^4)

Obverse 6.

AUCTORI : CONNEC :

Lower dot of colon entirely on head. I partly on head.

Var. 1. Prominent berry on forehead. Tail of R close to I and touches head. Last colon distant from mail and much nearer C. 6^1—A^1 (R^3)

Var. 2. Tail of R touches I but is clear of head. Last colon close to C and low. Breaks near milling before CONNEC, on head in front of wreath, and from forehead through face and field to corner of mail. 6^2—F^1 (R^4)

Var. 3. Fillet-ends between bust and A. A touches upper fillet. Hair very coarse. C distant from forelock. 6^3—G^1 (R^3). 6^3—G^2 (R^4)

Var. 4. Lower fillet-end distant from A. Lower left corner of mail ends in sharp point. T in AUCTORI high. Last colon nearly equi-distant from C and mail. Die-break at foot of A, in late impressions connecting A with mail. 6^4—F^5 (R^5). 6^4—I (R^3). 6^4—K^1 (R^5)

Var. 5. Fillet-ends between bust and A. Letters light and tall. I low and prolonged below the bottom of R. Last colon more distant from the bust than in var. 3. Die-break over NNE. 6^5—M (R^5)

Obverse 7.

AUCTORI CONNEC

Mailed bust facing left. Head of '86. Milling fine, but most of it lacking. Some specimens show a heavy die-break from neck through lower end of the fillets. 7—D (R^5)

Obverse 8.

AUCTORI : CONNEC :

Mailed bust facing left. Similar to type 7 but with the addition of colons to the legend. Large letters. Oblong break in field in front of nose. One of the rarest types of 1785. Crosby found only one. 8—D (R^6)

1785 REVERSE

Reverse A

INDE : ETLIB :

Goddess of Liberty seated, facing left, olive branch in right hand, liberty pole with cap in left.

Var. 1. Branch-hand points at D and space between D and E. Branch very close to inner dot of colon, its top about on a level with upper part of colon. B a trifle low. Last colon also low, the lower dot nearer B. 2—A^1. 6—A^1

Var. 2. Branch-hand points at E and space between E and colon. Inner dot partly on branch which extends considerably above colon. Last colon not far from date-line. In date 1 broad and high. 4^3—A^2

Var. 3. Branch-hand points at first colon. Branch curved. The folds of the skirt very prominent. E in INDE low and out of position. Lower dot of colon close to stem of branch. 3^1—A^3

Var. 4. Branch-hand points at D and space between D and E. Top of upper leaf considerably above colon. A second scroll projects downward from shield directly over the figure 5. 2—A^4

Reverse B.

INDE : ✣ ETLIB :

Branch-hand opposite E. Cross formed by four irregular heavy dots with light connecting line. Top of branch close to cross. Lower dot of first colon close to leaves on left. Base of E's defective. Compare Rev. K and Rev. L. 3^5—B

Reverse C.

INDE : ⁘ ⁘ ETLIB :

The second group of 4 dots irregular. Leaves of branch close. Date wide. 4^4—C

Reverse D.

INDE : •⁚• ETLIB :

Branch-hand opposite colon. Stem of branch thin and weak. Five leaves on left, four on right. 4^3—D. 4^4—D. 7—D. 8—D

Reverse E.

INDE. •⁚• •⁚• ET LIB . •⁚•

Periods large and heavy. Figures of date small. Top of 5 touches date line. 1—E

Reverse F.

INDE : ⊕ ET LIB :

Var. 1. Branch-hand points at D. I in INDE distant from date line. First colon low, the lower dot very close to E and merging into outer leaf of branch. LI close at base. Last colon close to B. Break through top of 8, extending more than half way towards 5. 3^4—F^1. 6^2—F^1

Var. 2. Branch-hand points at first colon and space between E and colon. I in INDE distant from date line, but not so far as in var. 1. First colon low, but clear of E and branch. Lower curve of B defective. 3^4—F^2

Var. 3. Branch-hand points at first colon. I near date line. Upper date line heavy. First colon sloping and further from E than in var. 5. 3^3—F^3

Var. 4. Branch-hand points at E. Letters of legend heavy. Third leaf on left of branch touches inner dot of colon. Lower dot of last colon close to rim of shield. 4^1—F^4. 4^2—F^4

Var. 5. Branch-hand points at first colon. Large, heavy letters. I in INDE near date line. Last colon low, rather distant from shield. Date lines uniform. 5^1—F^5. 5^2—F^5. 6^4—F^5

Reverse G

INDE : ✣ ✣ ET LIB :

Var. 1. Top of branch opposite centre of first quatrefoil. Liberty cap unusually large. Date line ends opposite foot of Liberty. 6^3—G^1

Var. 2. Top of branch about level with lowest part of first quatrefoil. Liberty cap small. 6^3— G^2

Reverse H.

INDE : ⁘ ET-LIB :

Crosby gives this reverse with obverses 4 and 5.

Reverse I.

INDE : ⁘ ET LIB :

Lower dot of first colon close to branch and might be taken for a leaf. Stem heavy and continuous. I slants to left. N is further from I than from D. The punctuation after first colon shows 4 regularly placed period-like dots, under which is a comma nearly united to the lowest dot. Late impressions show die-breaks from I to milling, between N and D, and between T and L. There are also cracks along the top of TL and the base of LIB. 6^4—I

Reverse K.

INDE : ⁘ ET LIB :

In worn specimens it is not easy to distinguish the group of 4 large periods from the heavy cross in Rev. B. and Rev. L. In such cases the type must be determined from other details which show a marked difference.

Var. 1. Top of I above top of N in INDE. Foliage abundant, top leaf disconnected. Bottom of I double-cut. Branch-hand points at E and space between E and colon. Last colon near date line. 6^4—K^1

Var. 2. Top of I and N nearly on same plane. Base of both E's defective. Last colon distant from date line. Possibly a duplication of Rev. B, with the connecting lines of the cross not showing. 3^5—K^2

Reverse L.

INDE : ⁘ ET LIB :

The group following first colon is a heavy cross like Rev. B with addition of 4 irregularly shaped dots. Branch-hand points at E.

Specimens sharp enough to show the dots added to the cross are very scarce. Pieces not showing these dots might easily be classified as Rev. B. The branch, however, is quite different from B. 3^1—L. 3^2—L

Reverse M.

INDE : ✠ ET LIB : ✠

Branch-hand points above colon. Letters tall. First quatrefoil about twice as far from colon as from head. Upper dot of both colons low. Date line double, the upper stroke the heavier. Not in Crosby. 6^5—M

1786 OBVERSE

Obverse 1.

AUCTORI CONNEC

Mailed bust facing right. Rudely cut die with heavy features and double chin. Ribbon bow with long, coarse ribbon-ends. Sometimes struck on light planchets. 1—A (R^4)

Obverse 2.

AUCTORI • CONNEC •

Mailed bust facing right.

Var. 1. Head of better work than in type 1. Ribbon-ends lighter and NE more widely spaced. Eight leaves in wreath. Periods opposite centre of letters. 2^1—A (R^3). 2^1—D^3 (R^6)

Var. 2. Head large, similar to Obv. 3. Broad shoulders. Periods opposite lowest part of letters. A distant from mail. Not in Crosby. 2^2—D^2 (R^5)

Obverse 3.

AUCTORI : CONNEC :

Mailed bust right. Head large, largest of the year. A near mail. All letters in CONNEC distant from head. 3—D^1 (R^4). 3—D^4 (R^6)

Obverse 4.

AUCTORI CONNEC

Mailed bust left.

Var. 1. Coarse, serrated milling. Letters in CONNEC all touch milling. 4^1—G (R^2)

Var. 2. Fine milling. Heavy break from neck through fillet-ends. Same die as Obv. 7 of 1785. 4^2—R (R^5)

Obverse 5.

AUCTORI : CONNEC :

Mailed bust left.

Var. 1. Coarse, serrated milling. The upper border of mail beneath the throat consists of a double curved line and is not fluted. The tail of the R extends too far to the right. Break through ORI. 5^1—H^1 (R^5)

Var. 2. Upper dot of both colons low. Last colon sloping, the upper dot nearer C. Four leaves on back of wreath. Three stemmed berries within wreath. Lowest

curl ends in a berry which it partly includes. Fine milling. Slight break at left of O in CONNEC. 5^2—H^1 (R^5). 5^2—I (R^3). 5^2—O^2 (R^5)

Var. 3. "Hercules Head." Bust and letters deeply cut. Scowling face, neck thick, chin rectangular. I long, extending above the top of R. Same die as Obv. 7 of 1787. 5^3—B^2 (R^6). 5^3—G (R^5). 5^3—N (R^3)

Var. 4. Coarse, serrated milling. Letters NEC touch milling. Semi-spherical protrusion below the front mail. In the field above the fillets a short hyphen-like line. Upper dot of both colons low. 5^4—G (R^2). 5^4—O^1 (R^2). 5^4—N (R^6)

Var. 5. Four leaves on front, three on back of wreath. Semi-circle below mail. Edges of leaves rough and irregular. Lowest curl encircles a berry. Milling fine. First colon sloping, the lower dot nearer I. Upper dot of last colon nearly level with top of C. Break from upper fillet. 5^5—M (R^3)

Var. 6. Four leaves on back of wreath. Milling fine. Semi-circular line below mail. Both colons low, dots large and heavy. V-shaped break from last colon to border and thence to lower right point of mail. 5^6—M (R^5)

Var. 7. Upper dots of both colons about on a level with the tops of the preceding letters and somewhat farther from I and C than the lower dots. Four leaves back of wreath with rough, irregular edges. The letters NEC recut. Milling fine, in most cases partly lacking. Heavy diagonal break across neck. Semi-circular line below mail distant from milling. 5^7—H^1 (R^4). 5^7—O^2 (R^5)

Var. 8. Upper dots of both colons farthest from letters. Four leaves on back of wreath. Semi-circular line heavy, touching milling. Partial double cutting of fluted border. Break on border above and to left of CO.
5^8—F (R^5). 5^8—H^2 (R^5). 5^8—O^2 (R^3)

Var. 9. Upper dot of both colons low. Upper dot of first colon the nearer to I. Four leaves on back of wreath with edges smooth and not outlined. Three berries with stems in wreath. The lowest curl ends in a berry, but does not encircle it. Sharp specimens show trace of a semi-spherical elevation. No semi-circular line. Fine milling. 5^9—B^1 (R^4). 5^9—Q (R^5)

Var. 10. Upper dot of both colons low. First colon has both dots near I. Four outlined leaves back of wreath. Lowest curl ends in a berry, but does not encircle it. First C in CONNEC shows double cutting. Break closing first C in CONNEC. Another closing and extending slightly below last C. 5^{10}—L (R^4). 5^{10}—P (R^5)

Var. 11. Upper dot of both colons low, the dots much smaller than those on other dies of Obv. 5. Four leaves on back of wreath with smooth edges, not outlined. No berries. Lowest curl heavy, without berry. No semi-circular line. 5^{11}—R (R^5)

Var. 12. Differs from Var. 10 chiefly in the position of the colons. The first colon is more distant from I and the last colon closer to C than in Var. 10. In Var. 10 the first colon slants to left with both dots close to I. In Var. 12 the upper dot is considerably further than the lower one from I. The last colon is low, the lower dot mostly below C. The tail of the R is further from I than in Var. 10. 5^{12}—L (R^6)

Obverse 6.

AUCTORI: CONNEC:

Draped bust, facing left. A distant from bust and U. U double cut, high and out of position. Three fillet-ends. 6—K (R^5)

Obverse 7.

AUCTORI: * * CONNEC: *

Draped bust left. A near bust. Upper fillet points at last colon. 7—K (R^6)

Obverse 8.

UCTORI: CONNNEC:

Mailed bust left. U near mail in the place usually occupied by A. No space left for an A. CONNNEC rather widely spaced. Chin pointed. Oblong die break back of head above the fillets. 8—O^1. Unique

This curious piece is not an overstrike. Probably the legend was so badly blundered that the die was discarded after a few trial pieces. The upper part of the reverse of the only known specimen shows the incused impression of a second obverse.

1786 REVERSE

Reverse A.

ET LIB INDE

1—A. 2^1—A

Reverse B.

INDE ET LIB

Var. 1. Top of D slopes to right. The lowest portion of the branch stem terminates in a line deflected to right. Break from forehead left to milling; also from 7 to I in INDE. Other breaks also. The impressions of this reverse are generally weak and the planchets defective. 5^9—B^1

Var. 2. Much stronger and better struck than Var. 1. No deflecting line from branch stem. Branch short, with seven coarse leaves. B touches shield. Die-breaks from border to back of head and through the final B. An extremely rare reverse. 5^3—B^2

Reverse C.

INDE ET LIB:

Crosby, 5—C. Mr. Crosby gives this combination, but no specimen of it has been located.

Reverse D.

INDE. ET LIB.

Var. 1. Liberty cap large and very wide, touching milling. Branch points at period. Top of T in ET above top of E. 3—D^1

Var. 2. First period distant from E. Liberty cap large and tall, clear of milling. Branch-hand opposite D. Top leaf points to right of period. E in ET slants to left. Usually found on small planchets, not showing date. 2^2—D^2



2^2



D^2

Var. 3. Legend very widely spaced. Liberty cap large. Branch-hand opposite N. Branch points at lower left corner of E. Broad, coarse milling. Figures of date small, all close to date line, which is double. 2^1—D^3

Var. 4. Periods in line with base of letters. Branch-hand opposite space between N and D. Top leaf slants to right and points to base of E. Date line double. Figures of date all considerably below the line, except the 6 which is less distant. 3—D^4

Reverse E.

INDE : ·⁚· ET LIB :

Crosby gives this reverse in combination with Obv. 5. Examples found prove on examination to be worn or weakly struck pieces generally of Rev. O.

Reverse F.

INDE. -⁞- ET LIB.

The horizontal lines of the cross are larger and much heavier than the vertical lines. Two strings below the hair-puff. Branch-hand opposite D. Branch short, with scanty foliage and long leaves. Upper leaf on left points at upright of E. No terminal leaf. 5^8—F

Reverse G.

INDE : -⁚- ET • LIB :

Group of four horizontal lines near first colon. Pole with Liberty cap. Stem of branch short and thick, with small leaves. Lower curve of B very close to rim of shield. Last colon has lower dot on shield. 4^1—G. 5^3—G. 5^4—G

Reverse H.

INDE : ET • LIB :

Var. 1. Drapery extends well to right over shield. Lower dot of last colon very close to shield, but not touching. Branch wide, leaves rather long. The stem of the branch ends in a line deflecting to right. No Liberty cap. 5^1—H^1. 5^2—H^1. 5^7—H^1

Var. 2. Drapery as in Var. 1. Lower dot of last colon barely touches shield. Highest point of top leaf a trifle below the lower right corner of E. No deflecting line from bottom of stem. 5^8—H^2

Reverse I.

INDE : ⁘ ET • LIB :

In the group of 4 dots between the first colon and the head the upper and lower ones are light and close, the lateral ones heavier and more distant. The elongated period between ET and LIB may have been meant for a hyphen. Lower dot of last colon entirely on shield. Branch-stem ends in a line deflecting to left. No Liberty cap. 5^2—I

Reverse K.

⁖ INDE : ⁖ ⁖ ET - LIB :

The third group of 4 lines close to pole. No Liberty cap. The branch-stem is prolonged in a line slightly curved and thicker at the end. 6—K. 7—K

Reverse L.

INDE : ≑ ET - LIB :

Group of lines about midway between colon and head. Colon dots small. Last colon clear of shield. Branch short. Branch-hand opposite upright of D. Pole has Liberty cap. 5^{10}—L. 5^{12}—L

Crosby Supplement, p. 372.

Reverse M.

INDE ≑ ET LIB

Neck long. Back of head squarely outlined by the hair. Pole has Liberty cap. From the lower left corner of the stem there is a short, curving line. Four transverse lines on globe, the upper two close.

Crosby, on page 372, refers to this reverse as B. It is, however, from a different die. 5^5—M. 5^6—M

Reverse N.

INDE : ⁖ ET • LIB : .

The group of 6 lines is midway between first colon and head. Lower dot of first colon partly below base of E. Lower dot of last colon on shield. B touches rim of shield. Pole has cap. Date line single. 5^3—N. 5^4—N

Reverse O.

INDE : ⁘ ET LIB :

Var. 1. In the group of 6 dots after the first colon the upper and lowest are the largest. Leaves of branch long. Lowest leaf on left points downward, corresponding leaf on right club-shaped and points upward. Stem of branch ends in a line deflecting to left. Lower dot of last colon on shield. Liberty cap touches milling. Date line single. 5^4—O^1

Var. 2. The periods at extreme right and left of the group of 6 are both a trifle above the adjoining ones, while in Var. 1 the period at the left is a trifle low. Top of upper leaf near E. Lower dot of first colon about on line with base of E. Lowest leaf

on left of branch points upward. Top leaf separated from stem. No line from bottom of stem. Lower dot of last colon on shield. No Liberty cap.

Specimens of this reverse showing distinctly the group of 6 dots are very difficult to obtain. Less perfect pieces are not especially rare. 5^2—O^2. 5^7—O^2. 5^8—O^2

Reverse P.

INDE : ET - LIB :

This reverse differs from Rev. H in having a hyphen instead of a period between ET and LIB. Neck long. Lowest leaf on left of branch turns slightly upward. Lower dot of last colon about half on shield. Traces of double date line, the lower line heavy. Four transverse lines upon the globe about equi-distant. 5^{10}—P

Reverse Q.

INDE : - ET-LIB :

Neck long. Stem of branch ends in a line curving to left. Four short leaves on left of branch. Terminal leaf points at lower dot of colon and is distant from it. Lower dot of last colon on shield. Three longitudinal lines on globe. Pole has Liberty cap. Double date line, the lower one heavy. The character after INDE is only approximate. Specimens found are too poor to show it exactly. 5^9—Q



5^9 Q

Reverse R.

INDE : ET-LIB :

Upper dot of first colon low, opposite middle of E. Branch short, with small, thick leaves. Lower dot of last colon half on shield. Fine curved line, but no drapery over shield. Date line single. 4^2—R. 5^{11}—R

1787 OBVERSE

Mailed Busts

Obverse 1.

AUCTORI CONNEC

Mailed bust, facing right.

Var. 1. The smallest head of the year. Wreath of seven leaves. A close to mail. I close to head. C distant. Same die as Obv. 1 of 1788.

1^1—A (R^3). 1^1—VV (R^6)

Var. 2. Largest head of the year. A close to mail, final C distant. On most specimens CONNEC weakly struck, the E not showing. "Bradford Head," "Mutton Head." 1^2—C (R^3)

Var. 3. Medium head. Letters large. A six-pointed star in front at lower edge of mail. Tip of nose opposite right edge of O. Last C touches mail. 1^3—L (R^4)

Var. 4. Head outlined and right of centre of planchet. Lowest point of mail near milling. Broken A. C low. Vermont C.

A die discovered by Dr. Hall after the publication of his list. 1^4—WW (R^6)

Obverse 2.

AUCTORI CONNEC

Mailed bust, facing left. TOR widely spaced. Tail of R nearly touches base of I. Second N double cut. · 2—B (R^3)

Obverse 3.

AUCTORI CONNEC ·

Mailed bust left. Fillet-ends tied in a bow. Sharp pointed A leans strongly to left. Letters of legend irregularly spaced. TORI on higher plane than AUC. Final C low. 3—G (R^5)

Obverse 4.

AUCTORI · CONNEC ·

Mailed bust left. Letters large and widely spaced. The periods nearly opposite the centre of the letters. Perfect die. Found also with crescent-shape die break in front of throat. Occasional examples with this die break are found on unusually large planchets. On later issues the die break becomes more extended and forms a horn-like projection from the mail.

4—L. Perfect die, R^3. Broken die and horned bust C. Large planchet, R^4

Obverse 5.

· AUCTORI · · CONNEC

Mailed bust left. Periods opposite centre of letters. CO close. 5—P (R^6)

Obverse 6.

· AUCTORI · · CONNEC ·

Var. 1. "Laughing Head." Periods, except the second, opposite centre of letters. Second period higher and nearly over top leaf of wreath. I over hair. Star below mail. 6^1—M (R^1)

Var. 2. "Simple Head." "Outlined Head." Second period opposite centre of I and distant from wreath. Break through star below mail to milling. 6^2—M (R^3)

Obverse 7.

AUCTORI : CONNEC :

"Hercules Head." CO widely spaced; also both N's. Same die as Obv. 5 of 1786, Var. 3. 7—I (R^4)

Obverse 8.

AUCTORI : ⁘ ⁘ CONNEC : ⁘

In the group of four dots in front of the wreath the right horizontal dot touches the top leaf, and in poorly struck or worn specimens does not always show. Three fillet-ends. Break from foot of A, sometimes extending upward to the chin.

8—N (R^3). 8—O (R^3)

Obverse 9.

× AUCTORI · × × CONNEC ·

First crosslet low. Last crosslet near C. Berries within wreath in triplets. O in AUCTORI and CO in CONNEC low. 9—D (R⁴). 9—E (R⁴). 9—R (R⁵)

Obverse 10.

· AUCTORI × × · · CONNEC ·

Second and third crosslets low. Last crosslet distant from C. No berries in wreath. A slightly low, its right stand prolonged nearly to U. O partly double cut. I also a little low. 10—E (R⁵)

Obverse 11.

✱ AUCTORI ✱ ✱ CONNEC ✱

Var. 1. First star very close to mail, but not quite touching. Last star touches mail. Stars with five blunt points. Second star distant to left of hair. A inclines decidedly to left. 11¹—E (R²)

Var. 2. First and last stars more distant from mail than in Var. 1. Base of I and second star near hair. Break from upper curve of C to upright of T. 11²—K (R³)

Var. 3. First star touches mail. A leans strongly to left and is very distant from U. U nearly or quite closed. CO relatively close. ONN widely spaced. Canfield collection. 11³—K (R⁶)

Obverse 12.

AUCTORI . ✱ CONNEC ✱

Mailed bust left. Twelve leaves in triplets. ONN weakly struck owing to an injury to the die. Period nearly all below I and close to forehead. Upper fillet-end close to final C. Last cinquefoil points between the fillet-ends. 12—Q (R⁴)

Obverse 13.

AUCTORI ✱ ✱ CONNEC ✱

Mailed bust left. Six-pointed stars. Nine leaves and five berries in wreath. UC more closely spaced than the other letters. Break connecting tops of O and R. 13—D (R³)

Obverse 14.

✱ AUCTORI ✱ ✱ ✱ CONNEC. ✱

Mailed bust left. Five pheons in legend. AUCTORI irregularly spaced. Tail of R touches base of I. Uprights of T, R and I all unusually heavy. Upper fillet-end points to period. 14—H (R³)

Obverse 15.

✱ AUCTORI ✱ ✱ ✱ ✱ CONNECT ✱ ✱

Mailed bust left. Seven cinquefoils in legend. Wreath has twelve leaves in triplets; six berries in pairs. 15—F (R³). 15—R (R⁶). 15—S (R⁵)

Draped Busts

Obverse 16.

AUCTORI : CONNEC :

Type 16 and all the following obverse types of 1787, except 52 and 55, have the bust draped and facing left.

Var. 1. Letters large. A rather near point of bust. Long-tailed R touching base of I. Second C partly on head. O close to head. Last C low. A curved fold of the toga projects from the bust near the lower left corner of A. 16^1—m (R^3)

Var. 2. Letters large. Both colons low. A distant from bust. C close to head, but does not quite touch. Last colon close to final C and end of toga. 16^2—NN^1 (R^4)

Var. 3. Small letters. A very distant from bust. Last colon distant from toga. Top of T slopes to left. 16^3—l^2 (R^4)

Var. 4. Letters large. Both colons low. A very near bust. Last C near fillet-end and in regular position in distinction from Var. 1, where the final C is low. 16^4—n (R^4)

Var. 5. Letters large. First colon distant from hair and a little low. Lower fillet points at last colon. All the C's nearly or quite closed. CONNEC widely spaced. Break from left foot of A, extending into the field. The same A punch was used with Obv. 8 of this year.

In sharp specimens three faint triangularly placed dots occur between the wreath and C. Dr. Hall regards this as accidental and showing little or no evidence of having been made with a punch. 16^5—n (R^3). 16^5—p (R^5). 16^5—u (R^6)

Var. 6. Letters large. A rather distant from bust. Lower dot of first colon very close to hair. AUCTORI widely spaced. C partly on head, O very close or touching head. Top of first N above that of second. C a little low, but not so low as in Var. 1. 16^6—NN^2 (R^6)

Obverse 17.

AUCTORI : -+-CONNEC :

Long-tailed R. Hyphen to right of cross connects with C. 17—g^3 (R^3)

Obverse 18.

AUCTORI : + + CONNEC

Letters small. A distant from bust. NNEC close. Final C connects with toga. Sharp specimens show a period on the toga after the final C. 18—g^1 (R^3)

Obverse 19.

AUCTORI : + + CONNEC :

The letters ORI on a lower plane than AUCT. Long-tailed R. Second cross close to head. 19—g^4 (R^2)

Obverse 20.

AUCTORI : * * CONNEC :

Large letters. A very close to bust. O and I in AUCTORI and final C in CONNEC low. Tail of R connects with base of I. Break from final C in CONNEC to border. 20—a^2 (R^3)

Obverse 21.

AUCTORI : × -+- CONNEC : ×

Letters small. A distant from bust. First cross high. Second cross midway between wreath and C. CO not far from head. Both fillet-ends point at last cross.

In Crosby's table of types Obv. 21 is given with a plain cross without hyphens. Dr. Hall could not find any such die, nor has any specimen of it been since located. In place of it Hall added a new obverse type (54) with hyphens attached to the cross. This seems an unnecessary duplication of types. In worn specimens the hyphens sometimes do not show, but in all other respects the dies are identical. 21—DD (R^4)

Obverse 22.

AUCTORI : * + CONNEC : ×

Letters small. Top of T leans to left. C touches head, O close. First N double cut. Lower fillet points to last cross. 22—g^2 (R^5)

Obverse 23.

AUCTORI : +- -+- CONNEC : -+-

Crosby records this obverse combined with his reverse A, but no collection is known to have an example of it. If it exists it is extremely rare.

Obverse 24.

- + - AUCTORI : - + - CONNEC :

First O leans to left. R high. Lower dot of first colon partly below I. Upper fillet-end opposite C. Lower fillet points to last colon.

24—g^3 (R^4). 24—g^5 (R^4). 24—FF (R^6)

Obverse 25.

* AUCTORI : × * CONNEC :

Large letters. Dots in the angles of first cross. Short hyphen-like lines in angles of cross before CONNEC. Fillets outlined, the lower pointing to colon.

25—b (R^3). 25—m (R^5)

Obverse 26.

* AUCTORI : × CONNEC : * .

A near point of bust. Letters large. R and I connect. Last cross between ends of toga. In sharp specimens there is a dot between the right arms of the last cross. Breaks through drapery to edge. 26—a^1 (R^5). 26—kk^2 (R^4). 26—AA (R^3)

Obverse 27.

+ AUCTORI : × × CONNEC : ×

Letters large. Imperfect A. Fillet-ends outlined and opposite E and C. EC low. Lower dot of last colon partly on toga. Last star high, opposite end of toga.

27—a^1 (R^5)

Obverse 28.

AUCTORI : * * CONNEC :

Large letters. Stars with five blunt rays. A near bust. R high. First colon nearly equidistant from I and star. C touches head; O very close. Lower fillet-end points to last colon. 28—m (R^3). 28—n (R^5). 28—o (R^6)

Obverse 29.

AUCTORI : ✱ ✱ CONNEC : ✱

Var. 1. Large letters. A touches drapery. C and O touch head. First colon low, the lower dot one half below I. Upper fillet-end points at last colon. Last star between colon and toga. 29^1—a^2 (R^5). 29^1—n (R^6). 29^1—p (R^4)

. Var. 2. A rather distant from drapery. I very low. Second star weak. C and O touch head. Four fillet ends, the third opposite last colon.

On some pieces from this die the weak second star is either very rudimentary or does not show. In his printed list Dr. Hall classified these as type 51, a new obverse. In his later notes he decided this was an error, and changed back the type to 29.

29^2—N (R^6). 29^2—o (R^5)

Obverse 30.

AUCTORI : ✱ ✱ CONNEC : ✱

A midway between bust and U. Right arm of T above adjoining O. Second cinquefoil close to head. Both colons low. Upper fillet points to last cinquefoil.

30—hh^1 (R^2). 30—X^1 (R^3)

Obverse 31.

✱ AUCTORI : ✱ ✱ CONNEC :

Var. 1. First cinquefoil close to drapery and mostly to left of it. A line to left of the upright of T. I low. Third cinquefoil nearer to C than to wreath. C touches head. Lower fillet-end points to last colon. 31^1—gg^1 (R^3). 31^1—r^4 (R^1)

Var. 2. First cinquefoil close to point of bust, almost entirely to left of it and about opposite the centre of A. Tops of R and I on same curve. C touches head. Lower fillet-end points below last colon. Break connects third cinquefoil with wreath.

31^2—r^3 (C)

Obverse 32.

✱ AUCTORI . ✱ ✱ CONNEC . ✱

Var. 1. First cinquefoil half under bust. Second cinquefoil distant from period and well to left of hair. Last cinquefoil close to period and toga. Lower fillet-end points at last period. Break connects last cinquefoil with end of toga. 32^1—X^3 (R^2)

Var. 2. First cinquefoil nearly half under bust. Second cinquefoil near period and distant from hair. Third cinquefoil distant from head. Lower fillet points at last cinquefoil. R and I lean to right. C touches head, O at medium distance. Upper fillet-end opposite last period. 32^2—X^1 (C). 32^2—X^2 (R^1). 32^2—X^4 (R^5)

Var. 3. First cinquefoil about one-fourth under bust. Second cinquefoil distant from period and most of it above hair. Third cinquefoil at moderate distance from head. Last cinquefoil below lower fillet-end. First period low, below base of I. Last period opposite lower fillet-end. Lower line of E imperfect and long. The E, which is made with an F punch altered, sometimes looks like F. Final C low. 32^3—X^4 (C)

Var. 4. First cinquefoil entirely to left of bust. Second cinquefoil distant from period and much to left of hair. Third cinquefoil distant from head, and nearly midway between wreath and C. Last cinquefoil opposite lower fillet-end. Both periods low, the final one about equidistant from C and cinquefoil. In CONNEC first C barely touches head. CO widely spaced, EC close. 32^4—X^5 (R^4). 32^4—Z^3 (R^5)

Var. 5. First cinquefoil half under bust and very high. Second cinquefoil low, not far from period and distant from hair. Third cinquefoil a little distant from head and midway between wreath and C. Last cinquefoil opposite upper fillet-end and distant from toga. First period further from I than from cinquefoil. Last period equidistant from C and cinquefoil. CT widely spaced. Right arm of T long. Final C closed. Break through final C. 32^5—aa (R^3)

Var. 6. First cinquefoil entirely to left of bust. Second cinquefoil low and near period. Third cinquefoil high and much nearer to wreath than to C. Last cinquefoil opposite lower fillet-end and distant from toga. First period low and very close to base of I. Last period above fillet-end and rather close to C. Lower right corner of I defective. EC low. 32^6—X^6 (R^5)

Var. 7. First cinquefoil about one-fourth under bust and distant from A. Second cinquefoil rather near period and distant from hair. Third cinquefoil high, distant from head. Lower fillet-end points at last cinquefoil. First period close to I and cinquefoil, but not so low nor so close to I as in var. 6. Last period midway between C and cinquefoil. R a trifle low. I leans to right. Defect at top of T. Final C low. 32^7—X^1 (R^5)

Var. 8. Letters and cinquefoils large. Second cinquefoil high, above hair and near period. Second and third cinquefoils near wreath. Lower fillet points to edge of last cinquefoil, which is nearer to end of toga than to C. First period near cinquefoil and opposite hair. Upper fillet end points just below last period. Top of A leans to left. C clear of head. No berries in wreath. 32^8—aa (R^5)

Obverse 33.

• AUCTORI : • • CONNEC : •

GROUP I. UPPER FILLET-END POINTS AT LOWER DOT OF LAST COLON: VARIETIES 1 TO 22.

In each group of this type the varieties are arranged according to the position of the first cinquefoil relative to the point of the bust, the earlier varieties having the cinquefoil entirely, or for the most part, left of the bust; the later varieties with the cinquefoil chiefly or entirely beneath the bust.

In Group I vars. 1 to 9 have the cinquefoil entirely or almost all left of bust.
vars. 10 to 13 have the cinquefoil partly under, but mostly left of bust.
vars. 14 to 18 have the cinquefoil about half under bust.
vars. 19 to 22 have the cinquefoil almost entirely under bust.

Var. 1. First cinquefoil entirely left of bust, about on a line with the middle of A. Second and last cinquefoils close to colons. Third cinquefoil nearly equidistant from wreath and C. Colons small and close to I and C. Upper curve of ORI on lower level than that of AUCT. C close to head. O rather distant. NNE high. Last cinquefoil distant from toga. Breaks from edge through top of A to U; from I through second cinquefoil and hair; from C through top of O to border; from border to end of toga. 33^1—Z^{13} (R^4). 33^1—Z^{19} (R^5)

Var. 2. First cinquefoil almost wholly left of bust. Second cinquefoil close to forelock. Third cinquefoil close to head and much nearer to C than to wreath. Last cinquefoil rather close to colon and toga. First colon equidistant from I and cinquefoil. Last colon close to C. Medium spacing in AUCTORI, the AU further apart than the other letters. C touches head. O close to head. Second N high. Final C slants to right. In some combinations of this obverse, die-cracks occur along the top and bottom of most of the letters; also from the top of I to the wreath and through the last colon and cinquefoil to the toga.

33^2—Z^5 (C). 33^2—Z^{12} (C). 33^2—Z^{17} (R^4). 33^2—Z^{21} (R^5). 33^2—Z^{22} (R^4)

Var. 3. Cinquefoils: First almost wholly left of bust; second midway between colon and wreath and mostly above hair; third distant from head and a little nearer to C than to wreath; fourth near toga and about twice as far from last colon. First colon wide, the lower dot nearer I. A distant from cinquefoil and U. C partly on head, O very close to head. First N double cut. E from altered F punch. Perfect die; also break from milling through E. In some cases this die-break changes the E into F and makes the legend read CONNFC. 33^3—W^1 (R^3)

Var. 4. Cinquefoils: First close to point of bust, nearly all to left of it; second opposite forelock and nearer colon than wreath; third nearer C than wreath; fourth a little closer to colon than to end of toga. First colon close to I, slanting to right, the lower dot nearer C. Last colon low, the lower dot mostly below C. Letters of AUCTORI irregular, UC and OR more widely spaced than the other letters. C clear of head, O not very distant. In CONNEC both C's low and E double cut. Break through AUCTO to milling. Another through lower part of bust to milling.

33^4—q (R^4). 33^4—Z^2 (R^5)

Var. 5. First cinquefoil close to bust, almost entirely to left of it; second a little distant from forelock and midway between colon and wreath; third clear of head and about equidistant from wreath and C; fourth equally distant from upper dot of last colon and toga. First colon wide, nearer to I than to cinquefoil. Last colon low, the lower dot mostly below C. A slightly high. C touches head. O close to head. Final C low. Die crack along top of AUC. 33^5—T^2 (R^3)

Var. 6. First cinquefoil considerably below point of bust and almost entirely to left of it; second distant to left of hair and midway between colon and wreath; third high, distant from head and a little nearer to C than to wreath. First colon slanting, the lower dot nearer to I and distant from cinquefoil. Last colon wide, near to C and cinquefoil, which is high, and opposite the upper dot of the colon. The letters RI slope to right. C close to head. O somewhat distant. CON widely spaced. Three fillet ends. Toga double cut. 33^6—KK (R^1)

Var. 7. First cinquefoil about three-fourths left of bust and distant from A; second opposite upper dot of colon and nearer to it than to wreath; third high, nearer to C than to wreath; fourth mostly beyond end of toga and equally distant from colon and toga. Dots of both colons heavy and close. Lower dot of first colon about half below the base of I. Legend well spaced. C low, almost touching head, O distant. Break through upright of T. 33^7—r^2 (C). 33^7—r^4 (R^6). 33^7—Z^{10} (R^6)

Var. 8. First cinquefoil one-fourth under bust and high, distant from A; second fairly distant from colon and hair; third rather distant from head, nearer C than to wreath; last midway between colon and toga. First colon close to I, the lower dot touching the base of that letter. Last colon a little nearer C than to cinquefoil. R high, leaning to right. Irregularity in die at right of I making the I thick and blurred. C clear of head, but close to it. O distant from head. E high, the top leaning to right. Breaks from milling to A and E. 33^{8}—Z^{13} (R^{4}). 33^{8}—Z^{19} (R^{5})

Var. 9. First cinquefoil close to bust and about three-fourths to left of it; second distant from colon and well to left of hair; third distant from head and about equidistant from wreath and C; last cinquefoil nearer to end of toga than to colon. Upper dot of both colons low. C clear of head, O distant. Break from milling through first C. In some cases other die breaks, especially through last colon to lower fillet.

33^{9}—s^{2} (R^{2})

Var. 10. First cinquefoil high, partly under bust, but mostly to left of it; second partly over and very close to hair; third near wreath; last distant from colon and very close to end of toga. First colon low, nearly midway between I and cinquefoil. Last colon in regular position, a little nearer to C than to cinquefoil. First O low. CO low and touching head. ON widely spaced.

33^{10}—Z^{7} (R^{5}). 33^{10}—Z^{8} (R^{4}). 33^{10}—W^{6} (R^{6})

Var. 11. First cinquefoil high, more than half to left of bust; second near colon, partly over and near hair; third close to head, and nearer to C than wreath; last cinquefoil low, midway between colon and end of toga. First colon low, a little nearer to I than to cinquefoil. Last colon not far from C. AUCTORI widely spaced. C touches head, O well clear of it. Top of E leans to right. Break over TO. Break from milling to upper fillet. 33^{11}—Z^{18} (R^{4}). 33^{11}—gg^{1} (R^{5})

Var. 12. First cinquefoil high, more than half to left of bust; second distant from colon and hair; third high, nearer C than wreath; last close to toga, the upper part in line with upper dot of colon. First colon low, the lower dot half below I and nearer to I than to cinquefoil. AUCTORI well spaced, with T high and I low. C very close to or touching head. O very close to C and distant from N. Break from first cinquefoil through AUCTO; also from milling through E.

33^{12}—W^{3} (R^{5}). 33^{12}—Z^{16} (R^{3}). 33^{12}—Z^{21} (R^{5}). 33^{12}—Z^{24} (R^{6})

Var. 13. First cinquefoil low, nearly half under and touching bust; second very low and almost touching lower dot of colon; third also low, touching head; last midway between final colon and end of toga. Colon dots close, the upper dot of both colons low and close to letters. A closer than usual to first cinquefoil and bust. C on head, O very close to head. Semi-circular break over O in AUCTORI, connecting with upper corner of T. Break from milling through fillets, sometimes closing the final C.

33^{13}—Z^{1} (R^{5}). 33^{13}—Z^{6} (R^{4}). 33^{13}—Z^{7} (R^{4}). 33^{13}—q (R^{5}). 33^{13}—ff^{1} (R^{6}). 33^{13}—hh^{2} (R^{6})

Var. 14. First cinquefoil about half under bust; second high, distant from colon and partly above forelock; third distant from head, nearer to C than wreath; last high, mostly above end of toga and rather nearer to toga than to colon. Colons distant from

letters and cinquefoils. Letters CO close to head, but do not touch. EC more closely spaced than other letters. A curved die-break, starting below the drapery, runs through the first cinquefoil and along the top of AUCT to the milling above first colon. Crack from point of bust to milling. 33^{14}—Z^{14} (R^3)

Var. 15. Cinquefoils: first half under bust and very distant from A; second high, opposite upper dot of colon, distant from colon and hair; third high, midway between C and wreath; fourth distant from colon, close to toga and mostly above it. Colon dots heavy and rather close. First colon low, the lower dot largely below I, but closer than the upper dot to I. Last colon near C. Top of R above top of O. CO clear of head. Top of second N leans to right. NNE high. 33^{15}—r^1 (R^1)

Var. 16. Second N double cut. Otherwise same die as var. 14. Breaks from milling to lower end of toga and from milling to last cinquefoil.

33^{16}—l^2 (R^4). 33^{16}—Z^{15} (R^1). (36^{16}—T^2) R^6

Var. 17. First cinquefoil half under bust and a little more distant from it than in var. 15; second cinquefoil high, a trifle over but not so far from hair as in var. 15. Third cinquefoil not very distant from head. Last cinquefoil nearly all above end of toga and well separated from it. Base of I trifle below R. In other respects this die closely resembles var. 15, differing chiefly in the position of the second and third cinquefoils, which are nearer to the hair than in var. 15.

33^{17}—r^1 (R^3). 33^{17}—r^5 (R^6). 33^{17}—gg^2 (R^2)

Var. 18. First cinquefoil about half under bust and close to drapery; second distant from colon, hair and wreath; third high, distant from head and a little nearer to C than to wreath; last cinquefoil about equidistant from colon and toga. First colon thus :, slanting to right, the lower dot nearly all below I and nearer than the upper dot to I. Last colon also low, the dots close, and midway between C and last cinquefoil. AUCTORI rather closely and about evenly spaced, with A and I a little low. Letters small. C touches head, O low and very close to head. Top of first N above that of second. This obverse is not in Hall's list. 33^{18}—Z^{24} (R^6)

Var. 19. First cinquefoil close to bust and almost wholly under it; second very close to colon and distant from hair; third high; last close to colon and toga. Both colons low and close to letters and cinquefoils. A nearer to bust than to cinquefoil. I low and double cut. (The double cutting does not show when this obverse is combined with Rev. q.) C touches head, O distant. Base line of E defective, the punch probably altered from F. Final C low, slanting to right.

33^{19}—Z^1 (C). 33^{19}—Z^2 (R^3). 33^{19}—q (R^5)

Var. 20. First cinquefoil almost entirely below drapery and very distant from A; second partly over and distant from hair, its centre on a line with upper dot of colon and nearer to colon than to hair; third midway between wreath and C; last nearer to end of toga than to colon. First colon wide, nearly equidistant from I and cinquefoil, the lower dot partly below I. Last colon nearer to C than to cinquefoil. Tops of R and I lean to right. C and O touch head and are widely spaced. O in CONNEC low. Final C low. 33^{20}—Z^9 (R^4). 33^{20}—Z^{11} (R^6)

Var. 21. Not in Hall's list, but given in his later notes as follows:

"Colons heavy, the lower periods about half below adjacent letters. AU and CT closer than the other letters in AUCTORI. CONNEC widely spaced, except NE. End of toga defective, giving the appearance of two small periods following the last cinquefoil."

Two specimens of this obverse have been located. 33^{21}—Z^{15} (R^6)

Var. 22. First cinquefoil partly below bust and closer to A than usual. AUCTORI widely spaced, UC closer than the other letters. Second cinquefoil low, its centre on a line with lower dot of colon. Last cinquefoil low, nearer colon than end of toga. Last colon low and close to C. I over an O. C close to head. 33^{22}—II (R^6)

The only specimen known is in the collection of Mr. Hillyer Ryder. The fillet-ends are not clear enough to decide whether it should be placed in the first or second group.

Obverse 33 continued.

GROUP II. IN VARIETIES 23 TO 28 INCLUSIVE, THE UPPER FILLET-END POINTS BETWEEN THE LAST COLON AND CINQUEFOIL.

In varieties 23 to 25 the first cinquefoil is entirely left of bust.

In variety 26 the first cinquefoil is about one-half under bust.

In varieties 27 and 28 the first cinquefoil is more than half under bust.

Var. 23. The first cinquefoil entirely to left of bust; second cinquefoil distant from colon and near hair; third high; last nearly midway between colon and toga. First colon low, the dots close and not far from I. Last colon near C. AUCT widely spaced. U slopes to left, its top above that of C. C touches head, O very close. NE high. E leans to right. 33^{23}—Z^4 (R^2). 33^{23}—hh^2 (R^5)

Var. 24. First cinquefoil entirely to left of bust. Top of U on same curve as adjoining C. C on head. CO closely spaced. E low. 33^{24}—Z^{10} (R^6)

Var. 25. First cinquefoil entirely to left of bust; second partly above forelock and nearer to it than to colon; third high; last distant both from colon and toga. Both colons a little low and distant from letters, the colon dots heavy. AUCTORI widely spaced. T a trifle high. C almost touching, O rather near head. NNE high. Break from neck to milling. Crack from lower fillet through edge of last cinquefoil. 33^{25}—W^3 (R^5). 33^{25}—Z^{10} (R^4). 33^{25}—Z^{24} (R^5)

Var. 26. First cinquefoil half under, nearly touching bust; second very near, or touching hair; second and third both near wreath; last cinquefoil opposite and near lower fillet-end, distant from toga. A very high, top sloping to left. O in CONNEC low and well on head. N above adjacent O. Heavy break across lower portion of drapery. 33^{26}—W^3 (R^5). 33^{26}—W^5 (R^6)

Var. 27. First cinquefoil more than half under bust and very close to drapery; second distant from colon and hair; third low, close to head; last cinquefoil a little nearer to end of toga than to colon. Colons in regular position, the first midway between I and cinquefoil, the last not far from C. Letters small. OR widely spaced. R and I lean to right. In CONNEC the EC closer than other letters. Break from nose to upright of R. 33^{27}—Z^{16} (R^6). 33^{27}—r^4 (R^4)

Var. 28. First cinquefoil most all under bust, below the drapery; second distant from colon and hair; third high; last about midway between C and toga, which ends in two heavy dots. Colons nearer to letters than to cinquefoils. Letters small. C close to, or touching, O near head. Base line of E long. Letters NEC rather close at bottom. Break from second N through head and nose to milling. (This break does not show when combined with Rev. Z^{20}.)

33^{28}—Z^{11} (R^3). 33^{28}—Z^{16} (R^3). 33^{28}—Z^{20} (R^6)

Obverse 33 continued.

GROUP III. IN VARIETIES 29 TO 41, THE LOWER FILLET-END POINTS AT THE LAST COLON.

In varieties 29 to 34 inclusive the first cinquefoil is entirely or almost entirely left of the bust.

In varieties 35 to 39 the first cinquefoil is partly under the bust, but mostly left of it.

In variety 40 the cinquefoil is half under the bust; in 41 entirely under.

Var. 29. First cinquefoil entirely under bust and nearer A than usual; second, opposite space between colon dots and not far from hair; third, clear of head, nearer to C than to wreath. Last cinquefoil touches end of toga. First colon sloping, thus :, the lower dot almost all below I. Last colon near C and a little further from the cinquefoil, the upper dot low. Letters large. Broad I, its base a little below the curve of OR. C on head, O distant. First N high. Top of E leans to right. Die-cracks in front of mouth and downward from chin. Sometimes other cracks through C to fillets and from edge through toga and drapery to neck. These cracks especially occur in the combination with reverse Z. 33^{29}—Z^{7} (R^4). 33^{29}—gg^{1} (R^4)

Var. 30. First cinquefoil very high, entirely left of bust; second above hair, its top on about the same curve as the tops of I and wreath; third distant from head, slightly nearer to C than to wreath; last high, near end of toga and distant from colon. First colon midway between I and cinquefoil. Upper dot of last colon weak, the lower dot below C. A slightly high, its top leaning to left. Upper curve of TORI on lower plane than that of AUC. U nearly closed at top. I broad and low. CO clear of head.

33^{30}—EE (R^5). 33^{30}—SS (R^6)

Var. 31. First cinquefoil below point of bust and entirely left of it; second distant from colon and not far to left of hair; third, close to head and nearer C than usual; last cinquefoil nearly touches end of toga. Lower dot of first colon close to I. Last colon midway between C and cinquefoil, the upper dot low. AU and CT relatively wide. I low. C touches head, O distant. Last C slants to right. 33^{31}—gg^{2} (R^5)

Var. 32. First cinquefoil entirely left of bust, its top on a level with the top of A; second near hair; third close to head and near C; fourth close to end of toga, about twice as far from colon. First colon slanting to right, the lower dot nearer I. Lower dot of last colon heavy, partly below C. ORI closely spaced. I heavy and low. C touches head, O distant. Left part of first N closed. E double cut. Final C very low.

Some examples show die-cracks from second cinquefoil through lower dot of colon and along base of I; from left of A through first cinquefoil to milling; from milling through drapery; in the field before face and bust. 33^{32}—Z^{13} (R^1)

Var. 33. First cinquefoil beyond point of bust, between drapery and A; second midway between colon and wreath, partly over hair; third not far from head, a little nearer C than wreath; fourth between end of toga and milling and very close to toga. First colon very low, the lower dot much below the base of I. Last colon widely spaced, the upper dot partly above the top of C. Small letters. U high, top of O leans to left. C touches, O close to head. CT and ON widely spaced.

On some specimens there is a slight crack downward from the eye along middle of nose; another also from top of wreath to milling. 33^{33}—Z^3 (R^4). 33^{33}—Z^{11} (R^3)

Var. 34. First cinquefoil close to point of bust and nearly all to left of it; second above hair, midway between upper dot of colon and wreath; third high; fourth opposite space between colon dots and very close to end of toga. Colons with large, heavy dots, the lower dot of first colon partly below I. Last colon wide, equidistant from C and cinquefoil. UCT, ORI, and ONNE widely spaced. Left arm of T defective. C partly on head. O close to head and nearer to C than to N. NNE high, close to milling. Final C very low.

Break from wreath to milling; also between the tops of O and N.

33^{34}—W^2 (R^5). 33^{34}—Z^3 (R^5). 33^{34}—Z^{11} (R^5)

Var. 35. First cinquefoil nearly touching bust and about three-quarters left of it. Second and fourth cinquefoils near colons. R high, its top sloping to right. Second N high. Wide spacing between N and E. EC close. The tail of R is long, apparently an alteration.

Break from lower part of bust through tops of letters AUCTO to milling over R. Heavy break near upper left corner of R. 33^{35}—Z^9 (R^6)

Var. 36. First cinquefoil about three-quarters beyond bust and well clear of it; second close to colon and distant to left from hair; third high, nearer to C than to wreath; last opposite space between colon dots, and nearly equidistant from colon and end of toga. Colons wide, in regular position. Letters small. In AUCTORI O and R lean to right. I high. C touches head. O at medium distance, leaning to left. NN high. Lower line of E heavy and long.

33^{36}—T^1 (R^3). 33^{36}—T^2 (R^1). 33^{36}—SS (R^6)

Var. 37. First cinquefoil about three-fourths beyond bust; second above hair, equidistant from colon and wreath; third close to head, nearer C than wreath; fourth mostly above upper dot of colon and end of toga and quite close to the toga. First colon distant from I and cinquefoil, the upper dot low. Last colon very low, the lower dot entirely below C. Letters widely spaced. A and I low. Period after O in AUCTORI. C partly on head. O high. E from an F punch altered clumsily, the base line too short. Final C low. A heavy dot at the milling, between last colon and cinquefoil. 33^{37}—Z^9 (R^3)

Var. 38. First cinquefoil below bust and more than half to left of it; second near and partly over hair, a little closer to upper dot of colon than to wreath; third

nearer C than wreath; last midway between colon and end of toga. Upper dot of colon low. AU more widely spaced than other letters. The letters ORI slope to right. O in CONNEC low. C close to head, but does not touch. Final C large and low.

Break from first cinquefoil along bottom of AUCT and through O to milling. Other breaks from milling downward through first colon, and from milling through upright of R to nose. With some reverses there is a curved break from left of A to milling. 33^{38}—Z^{1} (R^{3}). 33^{38}—Z^{6} (R^{4}). 33^{38}—Z^{23} (R^{5}). 33^{38}—gg^{1} (R^{5})

Var. 39. First cinquefoil close to bust and more than half to left of it: second distant from colon and hair: third distant from head, much nearer to C than to wreath; last very close to end of toga. Colons close, the upper dot of both low. AUC more widely spaced than other letters in AUCTORI. Top of first O leans to right. CO widely spaced. C well clear of head. O distant from head. 33^{39}—Z^{20} (R^{6}). 33^{39}—s^{1} (C)

Var. 40. First cinquefoil one-half or more under bust; second high, opposite upper dot of colon, distant from colon, hair and wreath; third very high, distant from head, wreath and C; fourth not far from colon, opposite upper dot. First colon nearer I than cinquefoil, but distant from both. Last colon near C, the dots close, the upper one low. AU widely spaced. C touches head, O distant. EC close. Break from milling through centre of A. Heavy break from end of toga and last cinquefoil to milling. 33^{40}—Z^{1} (R^{5}). 33^{40}—Z^{2} (R^{5})

Var. 41. First cinquefoil very far under bust and very distant from A; second distant from colon and hair; third distant from head, wreath and C; last cinquefoil opposite and close to end of toga. Dots of both colons small, the upper ones low. Letters small. UC and EC closer than other letters. C just touches head. O high, leaning to left. Wide spacing in ONNE. Heavy break from head across neck and drapery to milling. Crack from milling along left side of I to nose. 33^{41}—Z^{11} (R^{6})

Obverse 33 continued

GROUP IV. IN VARIETY 42 THE LOWER FILLET-END POINTS AT THE LAST CINQUEFOIL; IN VARIETIES 43 TO 45 BOTH FILLET-ENDS POINT AT LAST CINQUEFOIL.

Var. 42. First cinquefoil entirely left of bust. Second high, very near upper dot of first colon. Last cinquefoil opposite lower fillet-end. Both colons sloping, the upper dot nearer letters. Highest portion of upper fillet-end opposite right edge of final C. Last C low. 33^{42}—Z^{2} (R^{6})

Var. 43. First cinquefoil close to point of bust and wholly to left of it: second to left of hair, distant both from colon and hair; third nearer wreath than C; fourth midway between colon and end of toga and distant from both. Upper dot of both colons low. C touches, O very close to head. Second N high. ON and NE widely spaced. EC close. 33^{43}—q (R^{4}). 33^{43}—hh^{2} (R^{4})

Var. 44. First cinquefoil very high, above the top of A and about three-fourths left of bust; second very close to forelock; third touches head. Last cinquefoil distant from colon, fillet-ends and toga. First colon wide, midway between I and cinquefoil. Last colon low, the lower dot below C. AUCTORI widely spaced. C touches head, O close.

Break from milling through drapery to A, and from milling through O in CONNEC.
44^{44}—W^3 (R^5)

Var. 45. First cinquefoil about half under bust, distant from A; second distant from colon, near forelock and partly above it; third touching head; last distant from toga and fully twice as far from colon. First colon wide, the lower dot nearer I. Lower dot of last colon a little low. Wide spacing in AUCTORI except between U and C. Top of T above that of C. C in CONNEC touches head and is nearer to wreath than usual. O near head. Final C low. 33^{45}—W^2 (R^5)

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Obverse 34.

AUCTORI : ← → CONNEC : ←

The only die with large fleurons. First fleuron touches forelock.
34—k^3 (R^6). 34 ff^1 (R^3)

Obverse 35.

AUCTORI : ← → CONNEC : ←

Small fleurons. Crosby gives this obverse combined with his reverse F. Dr. Hall could not find this die. All supposed examples proved on close examination to be obverse dies of Type 37 with the first fleuron weakly struck or worn off by circulation.

Obverse 36.

→ AUCTORI : ← → CONNEC :

Small fleurons. First fleuron about half under bust. Both C's in CONNEC low. Lower fillet-end points to last colon. 36—k^3 (R^5). 36 l^1 (R^3). 36—ff^2 (R^5)

Obverse 37.

→ AUCTORI : ← → CONNEC : ←

First fleuron entirely left of bust. Varieties 1 and 2.
First fleuron mostly left of bust. Varieties 3 to 7.
First fleuron half under bust. Varieties 8 to 10.
First fleuron mostly under bust. Variety 11.
First fleuron entirely under bust. Varieties 12 to 14.

Var. 1. Fleurons: first left of bust; second distant from colon; third clear of head, nearer C than wreath; fourth close to end of toga. First colon nearer to I than to fleuron. Last colon about equidistant from C and final fleuron, the lower dot of the colon nearer I. I low. CO clear of head. Lower fillet points at last colon. 37^1—cc^1 (R^2)

Var. 2. Fleurons: first almost entirely left of bust; second distant from colon, hair and wreath; third close to head; fourth midway between final colon and toga. First colon sloping, the lower dot nearer I and about one half below that letter. Last colon also sloping to right and opposite upper fillet end. AUCT widely spaced, with U out of position and high. C touches head, O not far from head. Final C low and imperfect. Lower fillet points at last fleuron. Break through AUCTO. 37^2—k^5 (R^3)

Var. 3. Fleurons: first close to bust, partly under, but mostly left; second distant from colon, very close to hair; third not far from head, and nearer C than wreath; fourth near colon and toga. Both colons slightly low and well separated from letters. Long tailed R. Top of I leans to right. E high, leaning to right. Lower fillet points at last fleuron. 37^3—i (R^2)

Var. 4. Fleurons: first partly under, but more than half to left of bust; second distant from colon and hair; third very close to head; last distant from colon and end of toga. First colon distant from I. Last colon rather distant from C. T above O. I low. Second N above the first. C low. 37^4—k^1 (R^1). 37^4—RR (R^6)

Var. 5. Fleurons: first close to bust, and more than half to left of it; second distant from colon and hair; third near head; last about midway between colon and end of toga. Upper dot of first colon low and distant from I. Last colon low, well separated from C and fleuron. Long tailed R. C touches head, O very close. First N high.

Break from milling to head between third fleuron and C. A later break through second fleuron. 37^5—e (R^2)

Var. 6. Fleurons: first near bust, more than half to left of it; second near, but clear of hair; third clear of head, and closer to C than to wreath; last rather closer to end of toga than to upper dot of colon. First colon sloping, the upper dot more distant from I. Last colon very low, the lower dot mostly below C. Long tailed R. C on head, O rather close. Second N high. Final C low. Upper curved line of drapery extends nearly to ribbon bow. 37^6—k^4 (R^4). 37^6—B (R^6)

Var. 7. Fleurons: first more than half left of bust and almost touching it; last fleuron near toga. Dots of first colon equidistant from I. Three berries in wreath. T high. 37^7—h^2 (R^5)

Var. 8. Fleurons: first about half under and clear of bust; second near colon, a little further from hair; third close to head and much nearer to C than to wreath; last fleuron close to colon and end of toga. Colons well apart from letters. Last colon points at low part of upper fillet-end. UC and OR widely spaced. I low. C on head. O close to head. Crack from drapery along the bottom of AU. Another through third fleuron and top of wreath to upper dot of first colon.

37^8—k^2 (R^2). 37^8—HH (R^3). 37^8—LL (R^3)

Var. 9. Fleurons: first half under bust; second very distant from colon and distant to left of hair; third well above head and midway between wreath and C; last distant from colon and toga. Both fillet-ends point to last fleuron. Colons well spaced and nearer to the letters than to the fleurons. Last colon above the upper fillet-end. C close to head, but clear of it and much nearer to wreath than usual. Left lower curve of O quite close to head. Last C very low. Three berries in wreath. 37^9—e (R^3)

Var. 10. Fleurons: first half under and close to bust; second distant from upper dot of colon and considerably to left of hair; third nearer to C than to top of wreath; last distant slightly from colon and toga. Both colons sloping to right, the lower dots nearer the letters. Lower dot of last colon one half below C. C touches head, O somewhat distant. Last C low.

A slight die-crack is found from the top of U to the left arm of T. 37^{10}—RR (R^4)

Var. 11. Fleurons: first more than half under bust; second distant from colon and

hair; third close to head; last a little further from space between colon dots than from end of toga. First colon low. The dots of last colon nearer to C than to fleuron. AUCTORI widely spaced. A near bust. C touches head. O very close to head. Lower corner of N very distant from head. CON widely spaced. Final C low.

37^{11}—ff^2 (R^3)

Var. 12. Fleurons: first entirely under bust, touching drapery; second distant from colon and hair; third close to head, about half way between wreath and C; last low, midway between lower dot of colon and toga. Both colons sloping, the lower dots nearer letters. Legend widely spaced. U defective at upper left corner. Long tailed R. C touches head, O very close to head, leaning to left. The upper curved line of the drapery extends back of the neck up to the ribbon bow.

37^{12}—LL (R^4). 37^{12}—TT (R^5)

Var. 13. Fleurons: first wholly under bust, distant from A; second close to upper dot of colon, distant from hair; third well separated from head; last close to space between colon dots and pointing to lower edge of upper dot. First colon slopes decidedly to right, with the lower dot much the nearer to I. Last colon slightly low, the lower dot about half way between C and fleuron. R high and above O. R and I lean to right. C on head. O close to head, leaning to left and distant from N. Legend widely spaced.

Die cracks through middle of last C, and from bottom of C to toga. 37^{13}—HH (R^2)

Var. 14. Fleurons: first high entirely under bust; slightly distant from colon, pointing between the dots; third close to head; last distant from colon and low, pointing at lower dot of colon. Both colons low and sloping to right. Wide spacing in AUCTORI. C touches head. Upper fillet-end opposite space between last colon and fleuron. Lower fillet end points at last fleuron. A curved fold of the toga extends from point of bust uniting with the first fleuron.

37^{14}—cc^2 (R^6)

Obverse 38.

AUCIORI : + CONNEC : ×

AUCI widely spaced, ORI closer. Colons wide. Large letters.

38—GG (R^2). 38—l^2 (R^3)

Obverse 39.

• AUCTORI : • • CONNEC : •

Var. 1. First fleuron almost entirely under bust. Third fleuron close to head. Last colon low, the lower dot below C. Three berries in wreath. Medium spacing.

39^1—ff^2 (R^5). 39^1—h^1 (R^5)

Var. 2. First fleuron half under bust. Second fleuron distant from colon, pointing between the dots. First colon sloping, the lower dot much nearer I. Last colon regular. Milling coarse.

39^2—cc (R^4)

Obverse 40.

AUCTORI • • CONNEC

Large letters. Stars with five blunt points. Last C touches end of toga. In most specimens the space between A and U is incused, showing a small raised letter like a C.

40—N (R^5). 40—kk^1 (R^5)

Obverse 41.

✱ AUCTORI : ✱ ✱ CONNEC :

Large letters. Stars with five blunt points. Upper dot of colon after I very low. Last fillet end opposite C. Lower dot of colon on end of toga.

Crosby and Hall give the final punctuation of the legend as a period. Sharp specimens indicate that it is more likely a colon, the lower dot touching and blending with the end of the toga adjacent to C. 41—ii (R^3)

Obverse 42.

✱ AUCTORI : ✱ CONNEC : ✱

Large letters. Stars with five blunt points. First star partly under bust. I and upper dot of colon low. Period close to end of toga. Last star below drapery.

As in Obverse 41 the final punctuation may have been meant for a colon, the lower dot weak and blending with the end of the toga. However this is not so clearly shown as in Obverse 41. Break from milling to wreath. 42—o (R^6). 42—kk^2 (R^2)

Obverse 43.

✱ AUCTORI . ✱ ✱ CONNEC . ✱

Letters small and closely spaced except CO. Cinquefoils near periods. C touches head, O very close to head. F punch used for E. Upper fillet-end points at last cinquefoil. 43—Y (C)

Obverse 44.

✱ AUCTORI : ✱ CONNEC : ✱

First cinquefoil close to point of bust and most all to left of it. No cinquefoil between colon and wreath. Last cinquefoil close to toga. Lower dot of first colon close to hair. AUCT widely spaced. Top of ORI on a lower curve than that of AUCT. C partly on head. E made with an F punch altered. EC consecutively low.

44—W^4 (R^2). 44—W^5 (R^5). 44—Z^{10} (R^5)

Obverse 45.

-×- AUCTORI : -+- -×- CONNEC : -+-

Small letters. Cross with hyphens before AUCTORI. Hyphen to left of second cross joins the cross. Last cross between ends of toga. Second N high. Lower fillet-end points at last colon. 45—CC (R^4)

Obverse 46.

✱ AUCTORI : ×- -×- CONNEC : -×-

First cross below bust and high. Good specimens show dots in three angles of this cross instead of the plain cross in Dr. Hall's list. Second cross high. The hyphen to right of this cross touches wreath. Last cross between the ends of the toga. Colons wide. Letters large. A close to bust. The tail of R joins the base line of I. EC low. Last colon distant from toga. 46—BB (R^4)

Obverse 47.

• AUCTORI : -×- -×- CONNEC :

Large letters. Leaves of wreath outlined. The tail of R does not join I. Three fillet-ends opposite C. 47—a^3 (R^5)

Obverse 48.

•→ AUCTORI : •← •→ CONNEC : •←

First fleuron slightly under bust; last distant from toga. Upper fillet points at last colon. ON widely spaced. The periods after second and before third fleuron distinguish this legend from Obv. 37. 48—g^5 (R^5)

Obverse 49.

• AUCTORI : • • • CONNEC : •

Two cinquefoils between the wreath and C, as in Obv. 15. Two known. 49—Z^1 (R^6)

Obverse 50.

• AUCTORI . • • CONNEC . •

First cinquefoil between drapery and A; second close to colon and hair. Last cinquefoil between ends of toga. Letters large. Both fillet-ends point to C. Same die as Obv. 17 of 1788. Irregular die-cracks in front of face and neck, one passing through first C to milling. 50—F (R^5)

Obverse 51.

AUCTORI • CONNEC •

This obv. given by Dr. Hall, but later changed by him to obv. 29^2. Sharp, well struck specimens show an additional star, weakly struck, before CONNEC. This renders the legend identical with that of Obv. 29. The combination is 29^2—o.

Obverse 52.

AUCTORI : CONNEC :

Mailed bust, facing right. Head of medium size and round, with Roman nose. Fillet-ends tied with a bow. 52—G

Obverse 53.

•→ AUCTORI : •← •→ CONNEC : •←

First fleuron low, slightly under bust. Second fleuron also low. Last fleuron distant from colon and toga. Upper dot of last colon the nearer to C.

The period before third fleuron distinguishes this legend from those of Obverses 37 and 48. 53—FF (R^4)

Obverse 54.

AUCTORI : × -+- CONNEC : ×

Legend the same as Crosby's Obv. 21 with hyphens added to the second cross. All specimens examined of Type 21 prove to be identical with Hall's 54, with the hyphens weakly struck or worn off. This die, therefore, has been listd as Obv. 21 with hyphens added to Crosby's legend.

Obverse 55.

* AUCTORI . * * CONNEC . *

Mailed bust, facing left. Same legend as obverse 32. Mule of obv. 16 of 1788.
55—F (R^6)

1787 REVERSE

Reverse A

ETLIB INDE

Coarse, serrated milling. Large Liberty cap. 1^1—A

Reverse B.

INDE ET LIB

Large letters. Coarse milling, most of it wanting. Branch points at lower left corner of E in ET. 2—B. 37^6—B

Reverse C.

INDE • ET LIB

Period after INDE large. Date small, figures leaning to left, short branch with three leaves. Elbow forms a sharp point. 1^2—C

Reverse D.

\+ INDE + ET + + + + LIB + +

Two crosslets between ET and head. The curved lower end of the shield terminates in a crosslet. Left upright of N double cut. 9—D. 13—D

Reverse E.

* INDE * ET * * LIB * *

Stars with five blunt points. Plume projecting from hair-knot, wide spacing between I B. 9—E. 10—E. 11^1—E

Reverse F.

* INDE * ET * * * * LIB * *

Eight cinquefoils in legend, the first weak and close to foot of Liberty. The last cinquefoil close to shield. Coarse, serrated milling. 15—F. 50—F. 55—F

Reverse G

INDE * ET LIB *

Stars with six sharp points. Last star near B, distant from shield. 3—G. 52—G

Reverse H.

INDE • ET → → LIB. ←←

Small date. A pheon on each side of date. Top of T in ET weak. 14—H

Reverse I.

INDE : ⁘ ET LIB.

Lower and right dots of group connect. ET widely spaced. Break in the die between D and E. 7—I

Reverse K.

* INDE * * ET LIB *

Stars with five blunt points. Plume from hair-knot. INDE widely spaced. Stars somewhat distant from foot and shield. 11^2—K. 11^3—K

Reverse L.

INDE • ET • LIB •

Letters large with wide spacing. Top leaf of branch below lower right corner of E. 1^3—L. 4—L

Reverse M.

INDE : * * * ET • LIB :

Stars with six blunt points. Liberty cap low. All figures of date distant from date line. 6^1—M. 6^2—M

Reverse N.

INDE * * * ETLIB *

Stars with five blunt points. Branch points at first star. Last star close to lower part of shield. Figure 8 imperfect. 8—N. 29^2—N. 40—N

Reverse O.

* INDE : * * * ETLIB : *

Stars with five blunt points. D smaller than other letters in INDE. Lower line of L long and close to base of I. 8—O

Reverse P.

• IN DE • ET LIB •

The first two periods opposite the centre of letters; the last period high. Branch between N and D. The lower right corner of B disconnected and extending to right. In date 17 low. 5—P

Reverse Q.

• IN DE • ETLIB • •

Both periods low. Last period and cinquefoil partly in shield. Branch hand between N and D. Branch points at upper part of upright of D. Coarse milling. 12—Q

Reverse R.

• IND × × • ET • × • • LIB • • ×

Eleven crosslets in legend. The lower curved portion of the shield terminates in a crosslet as in reverse D. Leaves of branch made with the same crosslet punch. Coarse milling. Irregular die-break to left of last 7 of date, giving the 7 the appearance of having been struck over an 8. 9—R. 15—R

Reverse S.

* INDL * ET * * LIB *

Besides the cinquefoils in the legend, a cinquefoil is shown on each side of the date. The one on the left is distant from the figure 1 and touches the line. The cinquefoil on the right is below the line and close to the top of 7. In the date I is distant from 7 and leans decidedly to left.

A heavy break from right edge of shield to border nearly obliterates the letters IB. The few specimens known of this very rare die are all in poor condition. 15—S

Reverse T.

• INDE : • • • • ETLIB : •

Var. 1. Lower dot of last colon distant from shield. No terminal leaf to branch. Date-line single.

Heavy break from edge near last cinquefoil. Break from milling between edge and fourth cinquefoil. 33^{36}—T^1

Var. 2. Lower dot of last colon touches shield. "Skeleton hand." Date-line double. 33^{5}—T^2. 33^{16}—T^2. 33^{36}—T^2

Reverse V.

• INDE . • • • • ET LIB •

This die is given in Crosby's table in combination with obv. 32. Dr. Hall also includes it in his list, but his record of the number of pieces of each variety found contains no examples of Rev. V except two, both of which he later erased from his list. It seems reasonably certain that the type is Rev. X with the final cinquefoil not showing.

Reverse W.

• INDE : • • • • ETLIB :

Var. 1. First cinquefoil distant from foot and I. Leaves of branch distant from colon and second cinquefoil. I low, distant from N. L low. B altered from R.

Breaks: Second cinquefoil to branch; from lower part of shields to edge; through second E. 33—W^1

Var. 2. First cinquefoil nearer foot than I. Branch long ending on a level with top of second cinquefoil. Second leaf to left almost touches colon. Left part of date-line triple. Diagonal break across shield. 33^{34}—W^2. 33^{45}—W^2

Var. 3. First cinquefoil and legend distant from milling. Branch ends opposite second cinquefoil. Second and third leaves on left near lower dot of colon. Lower line of E in ET and sloping downward. B low. Lower dot of last colon close to B and shield. 33^{12}—W^3. 33^{25}—W^3. 33^{26}—W^3. 33^{44}—W^3

Var. 4. Legend distant from milling. First cinquefoil close to leg of goddess. First colon distant from E and sloping to right. Second leaf on left near colon-dot. Last colon also sloping, the lower dot close to B and cinquefoil. B altered from R. 44—W^4

Var. 5. Branch-hand opposite space between D and E. N double cut. Break between T and L from pole to milling. 33^{26}—W^5. 44—W^5

Var. 6. INDE widely spaced, I leaning to left. Upper line of first E imperfect. Colon distant from E and still further from cinquefoil, the lower dot below the base line of E. Third cinquefoil relatively high. Second leaf on each side of branch prominent. Branch points to left side of third cinquefoil, ending opposite second. Base of E in ET curved. T high. LIB close at bottom. B a little low. Last colon sloping, the lower dot heavy and entirely on shield. Crack from upper left corner of I to border and from shield to milling. Ryder collection. 33^{10}—W^6

Reverse X.

• INDE . • • • • ETLIB . •

Var. 1. First cinquefoil near foot, in line with top of I. Fourth cinquefoil low. First colon distant from E and cinquefoil. Last colon close to shield and cinquefoil. Top of branch almost touches third cinquefoil. I low, leaning to left. E in ET low. No curls. 30—X[1]. 32[2]—X[1]. 32[7]—X[1]

Var. 2. First cinquefoil near foot, its top slightly below the level of top of I. First period near base line of E and partly below it. Last period partly on shield. Last cinquefoil close to shield and opposite the upper curve of B. Branch points a trifle right of the centre of the third cinquefoil. IND widely spaced, with I low and leaning to left. Letters of ETLIB irregular with E high. ET slants to left. IB successively low.

Die-crack connecting the top and bottom of first 7. 32[2]—X[2]

Var. 3. First cinquefoil about twice as far from I as from foot. First period touches base line of E. Last period distant from shield, nearer to B than to cinquefoil. Branch points to right of third cinquefoil and ends just below it. E in ET slants to left. Top of T higher than adjoining letters. I in LIB high. B altered from R. 32[1]—X[3]

Var. 4. First cinquefoil nearer to foot than to I and partly above the top of I. First period somewhat distant from E and very distant from second cinquefoil. The three cinquefoils between E and head all high. Last period half on shield. Last cinquefoil distant from B and often weakly struck. Letters heavy. Lower line of first E defective. Branch points at third cinquefoil and is distant from it. Second leaf on left points at colon. T high. B low, altered from R. Lower sash-end opposite space between L and I. 32[2]—X[4]. 32[3]—X[4]

Var. 5. Branch points left of third cinquefoil, its highest point opposite right edge of second. Fourth and fifth cinquefoils low. Last cinquefoil slightly distant from shield. Last colon touches shield. Lower sash-end opposite I. 32[4]—X[5]

Var. 6. Branch points at centre of third cinquefoil, ending below it. First period close to E and about half below it. Last period near shield, which is indented opposite the period. Last cinquefoil nearly touches shield. The two lower leaves on each side of branch large and prominent. T in ET and I in LIB slightly high. 32[6]—X[6]

Reverse Y.

• INDE . • — • — • ETLIB . •

The three cinquefoils after INDE separated by hyphens and widely spaced. Last colon close to B and final cinquefoil. Branch crooked. The lowest leaf on left pointing diagonally downward. 43—Y

Reverse Z.

• INDE : • • • ETLIB : •

In varieties 4, 5, 14, 15, 19 and 20 the lower dot of the last colon is distant from the shield.

In varieties 1, 2, 3, 6, 8, 10, 11, 13, 16, 17, 21 and 23 it is close to the shield and touches the shield in var. 12.

In varieties 7, 9, 18 and 24 the lower dot is partly or wholly in the shield.

Var. 1. First cinquefoil close to foot; second, third and fourth nearly equidistant, the third high. Last cinquefoil close to upper dot of colon and shield. First colon low, the lower dot almost all below E. Last colon also low, the dots close, the lower one very near but not touching shield. Top leaf of branch points at right side of third cinquefoil, ending somewhat below it. Branch-hand opposite E. I leans to left. First E struck over an N. E in ET leans to left. Top of T further from E than from L. Lower curve of B too small. Date-line curved over last 7. 8 touches line.

When combined with obv. 33^{40} die-cracks occur from border along the edge of fourth cinquefoil to shoulder and across shield to milling; also from right shoulder to pole-hand. 33^{13}—Z^1. 33^{19}—Z^1. 33^{38}—Z^1. 33^{40}—Z^1. 49—Z^1

Var. 2. First cinquefoil nearer to foot than to I. Wider spacing between third and fourth cinquefoils than between second and third. Last cinquefoil near shield and opposite upper colon-dot. Both colons close to letters with the upper dot low. Lower dot of last colon close to shield. Branch-hand opposite E. Leaves distant from colon. Top leaf points to right edge of third cinquefoil, terminating a little below it. Close spacing in INDE. Bottom of LIB close. All figures below date-line. Late issues show vertical break through head and neck. 33^{4}—Z^2. 33^{19}—Z^2. 33^{40}—Z^2. 33^{42}—Z^2

Var. 3. First cinquefoil high and close to foot. Third cinquefoil nearer to second than to fourth. Last cinquefoil close to colon and shield. Colons regular and near cinquefoils. Branch-hand opposite E. Top leaf points at centre of third cinquefoil and is considerably below it. INDE widely spaced. I in LIB high. B apparently made from an R punch. Figures 1 and last 7 encroach on date-line.

32^{4}—Z^3. 33^{33}—Z^3. 33^{34}—Z^3

Var. 4. First cinquefoil nearer to foot than to I. The three following cinquefoils nearly equidistant, the second a little low. Last cinquefoil touches shield and is near lower dot of colon. First colon near E and cinquefoil slanting to left, the upper dot low. Last colon near B and a little further from shield. Top leaf points to left part of third cinquefoil and is near to it. E in ET leans to left. LI a trifle high. B connected from R. In date 1 low, 8 touches line, which is curved over both 7's. 33^{23}—Z^4

Var. 5. First cinquefoil nearer foot than I. Wider spacing between third and fourth cinquefoils than between second and third. Last cinquefoil distant from shield, opposite space between colon-dots. First colon nearer to E than to cinquefoil, the lower dot opposite second leaf on left of branch. Last colon near B and distant from shield. Branch points to centre of third cinquefoil, the top leaf out of position to the right. I leans to left. All figures of date touch line. Break from D across waist to pole. 33^{2}—Z^5

Var. 6. First cinquefoil a little nearer to I than to foot. The three following cinquefoils about equidistant. Last cinquefoil close to colon and shield. Colons near cinquefoils. Branch-hand opposite upright of E and space between D and E. Branch long and narrow, printing at centre of third cinquefoil. I low, leaning to left. In ETLIB E and B low. All figures date below line. 33^{13}—Z^6. 33^{38}—Z^6

Var. 7. First cinquefoil nearer foot than I. Fourth cinquefoil low opposite face. Last cinquefoil high, mostly above upper dot of colon and close to rim of shield. First colon near E distant from cinquefoil. Last colon close to B, slanting to right, the lower

dot half on shield. Branch-hand opposite E. Branch wide, its top leaf pointing right of second cinquefoil and terminating opposite the centre of the cinquefoil. First I low, TL widely separated. B low. Date-line defective at left. 1 high, distant from 7. Other figures below line. 33^{10}—Z^{7}. 33^{18}—Z^{7}. 33^{29}—Z^{7}

Var. 8. First cinquefoil nearer foot than I, but distant from both. Following three cinquefoils about equally spaced, the fourth low. Last cinquefoil near shield distant from colon. Lower dot of last colon close to shield and a little nearer B than the upper dot. Branch-hand opposite E and space between D and E. Branch short and broad, pointing nearly at centre of second cinquefoil and terminating well below it. Third leaf on left touches lower dot of colon. In ETLIB E and B low, LI close at bottom. B from an R punch with a long lower line added. Date-line irregular and broken, all figures touching it. 33^{10}—Z^{8}

Var. 9. First cinquefoil closer to foot than I, but less distant from I than usual. Third cinquefoil nearer to fourth than to second. Last cinquefoil close to upper dot of colon and touches shield. First colon much nearer to E than to cinquefoil. Upper dot of both colons low. Lower dot of last colon in shield. Branch-hand opposite upright of E and space below. Top of upper leaf about level with right edge of second cinquefoil. N distant from I, its top above that of D. B low, leaning to right. Date-line curved over both 7's. 1 touches the line. 8 encroaches on it. Crack from pole hand through latter part of legend. 33^{20}—Z^{9}. 33^{35}—Z^{9}. 33^{37}—Z^{9}

Var. 10. First cinquefoil near foot. Third cinquefoil nearer to second than to fourth. Last cinquefoil close to shield, distant from colon. Colons distant from letters with the upper dot low. Upper dot of first colon more distant from E. Lower dot of last colon near shield. Branch-hand opposite E. Second leaf on left opposite colon, but distant. Top leaf points at left edge of third cinquefoil and is opposite the highest part of the second. Wide spacing in INDE, the I leaning to left. B slightly low, inclining to right. Lower date-line defective. 33^{7}—Z^{10}. 33^{24}—Z^{10}. 33^{25}—Z^{10}. 44—Z^{10}

Var. 11. First cinquefoil a little nearer I than foot, but distant from both. The three following cinquefoils equidistant. Last cinquefoil close to shield, distant from colon. Colons distant from letters with upper dot low. Lower dot of last colon near shield. Branch-hand opposite E and space below. Branch points left of third cinquefoil and ends opposite second. Second leaf on left points to lower right corner of E. Lower left corner of second E near pole-hand B altered from R. In date first 7 high, the line above defective. Last 7 low.

Break from milling through upright of T; also from globe through last 7.

33^{20}—Z^{11}. 33^{28}—Z^{11}. 33^{33}—Z^{11}. 33^{34}—Z^{11}. 33^{41}—Z^{11}

Var. 12. First cinquefoil rather far from foot and twice as far from I. Third cinquefoil slightly nearer to fourth than to second. Last cinquefoil close to upper dot of colon and shield. Colons near letters with the upper dot low. Lower dot of last colon close to B and touching shield. Branch-hand opposite space between DE. Branch points left of third cinquefoil and ends slightly above second. Uprights of IB parallel. B low. All figures touch date-line. Die crack from foot to top of first I; through 8; along top of ETLIB. 33^{2}—Z^{12}

Var. 13. First cinquefoil about midway between foot and I. Third cinquefoil nearer second than to fourth. Last cinquefoil opposite upper dot of colon and close to shield. Colons close to E and B, the upper dot of both low. Lower dot of last colon near shield. Branch points at left part of third cinquefoil and ends a little above second. Third leaf on left is near colon, pointing to the lower dot. B low. In date 1 high, both 7's below line. Crack through fourth cinquefoil.

33^{1}—Z^{13}. 33^{8}—Z^{13}. 33^{32}—Z^{13}

Var. 14. First cinquefoil low, almost touching figure. The three following cinquefoils equally spaced. Last cinquefoil distant from colon and shield. Both colons low, with their lower dot almost all below the preceding letters. Branch-hand opposite colon and space above it. Branch ends half way between second and third cinquefoils and points just left of the third. Top leaf disconnected to left. I in LIB double cut. 1 touches line, 787 below it. Break from edge nearly to branch between colon and second cinquefoil. 33^{14}—Z^{14}

Var. 15. First cinquefoil nearly equidistant from foot and I. Much wider spacing between second and third cinquefoils than between third and fourth. Last cinquefoil very close to shield. Colons with dots close. First colon much nearer to E than to cinquefoil. Last colon low, midway between B and cinquefoil, the lower dot rather distant from shield. Branch-hand opposite E and space above it. Branch long, pointing at edge. Fourth leaf from bottom on both sides prominent. First I inclines to left. N high. Top leaf of branch disconnected between second and third cinquefoils. IB low. Lower curve of B double cut. First 7 below, other figures touch date-line. 33^{16}—Z^{15}

Var. 16. First cinquefoil distant from foot and I. Third cinquefoil slightly nearer second than fourth. Last cinquefoil touches shield, opposite upper dot of colon and distant from it. Upper dot of both colons low. Last colon about twice as far from cinquefoil as from B, the lower dot not far from rim of shield. Branch-hand opposite upright of E and space below. Branch points right of second cinquefoil and ends opposite its lower edge. First I low and distant from N. Upright of T extends below L. B, made with an R punch altered, leans strongly to right. On this reverse the pole-hand is lacking, the arm terminating abruptly below E.

Die-break from milling through top of E. 33^{12}—Z^{16}. 33^{27}—Z^{16}. 33^{28}—Z^{16}

Var. 17. First cinquefoil not far from foot, about twice as far from I. Third cinquefoil much nearer to second than to fourth. Last cinquefoil touches shield. Dots of both colons close, the upper dot low. First colon rather near E, very distant from cinquefoil. Last colon slopes to left, the lower dot very close to shield. Branch-hand mostly opposite space between E and colon. Branch points at left part of third cinquefoil ending just above second. Second leaf from top on left near cinquefoil. Top of letters in INDE not all on same curve. ET wide. LI close at base. Date line defective over both 7's.

Long break through E across figure to border. Break at right of foot through date line. 33^{2}—Z^{17}

Var. 18. First cinquefoil near foot and low. Widest spacing between second and third cinquefoils. Last cinquefoil close to upper dot of colon and touches shield. Lower dot of last colon half on shield. Branch-hand opposite E. Branch points at left part

of third cinquefoil, its top between second and third. LI close at base. Lower curve of N close to shield. Date-line curved over 1 and both 7's. 33^{11}—Z^{18}

Var. 19. First cinquefoil about equidistant from foot and I. Three following cinquefoils equally spaced. Last cinquefoil distant from shield, opposite space between dots of colon. Last colon midway between B and cinquefoil and distant from shield. Branch-hand opposite E and space below it. Branch points at left edge of third cinquefoil, the top leaf a little above second. Second leaf on left very near colon. First E high, leaning to right. Lower corner of E in ET distant from pole-hand. Lower curve of B small. Date about evenly spaced. 33^{1}—Z^{19}. 33^{8}—Z^{19}

Var. 20. First cinquefoil high, distant from foot and I. Group of three cinquefoils about equally spaced. Last cinquefoil rather distant from shield. Dots of first colon close, the upper are low. Last colon midway between B and cinquefoil, the lower dot distant from shield. Branch-hand opposite space between D and E. Top of branch opposite second cinquefoil, pointing to left of third. D low. Top of first E leans to right. Last 7 low.

Heavy break over last cinquefoil, extending later to upper part of B. Semi-circular figures encroach on date-line. 33^{2}—Z^{21}. 33^{12}—Z^{21}

Var. 21. First cinquefoil high, a little nearer to foot than to I. Group of three cinquefoils widely and evenly spaced. Last cinquefoil near upper dot of colon and shield. First colon sloping, the lower dot nearer E. Last colon also sloping, the dots close, the lower one very near shield. Branch-hand opposite right part of E and space between E and colon. Branch points at third cinquefoil, the top leaf a little below it. Top of N above that of D. N struck with a punch altered probably from an O. All figures encroach on date-line. 33^{2}—Z^{21}. 38^{12}—Z^{21}

Var. 22. First cinquefoil high, nearer foot than I. Second and third cinquefoils more widely spaced than third and fourth. Last cinquefoil very near or touching upper dot of colon. Branch short, pointing between second and third cinquefoils. Top leaf about opposite right edge of second cinquefoil. Branch-hand opposite E. N struck with same altered punch as in Z^{21}.

Heavy break near milling to right of fourth cinquefoil. 33^{2}—Z^{22}

Var. 23. First cinquefoil distant from foot and I. The following group of three evenly and rather closely spaced. Last cinquefoil close to shield. First colon distant from E and still more so from cinquefoil. Last colon nearer to cinquefoil than to B, the lower dot very close to shield. Branch-hand opposite space between D and E. Top leaf disconnected and pointing at third cinquefoil. B low leaning to right.

Heavy break from shoulder to milling between third and fourth cinquefoils. Die crack from edge through lower right corner of L. 33^{38}—Z^{23}

Var. 24. First cinquefoil high in line with top of I. Group of three cinquefoils about evenly spaced. Last cinquefoil distant from upper dot of colon and close to shield. First colon slants to right and is distant from cinquefoil. Last colon very low, the lower dot entirely on shield. Branch-hand opposite E. Branch points to third cinquefoil, ending about half way between second and third. First I low and double cut. N high. LIII successively low. B altered from R. Figure 1 small, leaning to left. In some speci-

mens a heavy break occurs from milling above fourth cinquefoil extending downward across shoulder and drapery to the milling on the right of 7. This break is especially noticeable when reverse 24 is combined with obverse 18.

33^{12}—Z^{24}. 33^{18}—Z^{24}. 33^{25}—Z^{38}

Reverse a.

× INDE : –+— +– –+– ETLIB :

Var. 1. Large letters. Branch-hand opposite E. Third leaf on left of branch close to lower dot of colon. L high. Lower line of B light. Lower dot of last colon on shield. Break from upper right corner of L to edge. 26—a^1. 27—a^1

Var. 2. Large letters. Branch-hand opposite D. Top leaf near lower dot of colon. E in ET low. Left lower corner of T defective. Last colon very low. Upper dot touches rim, lower dot all on shield. 20—a^2. 29—a^2

Var. 3. Large letters. Branch-hand opposite upright of E. Branch points at second cross. IB successively low. Hyphen to left of fourth cross on hair. Hyphen to right of fourth cross touches pole. 78 widely spaced. 47—a^3

Reverse b.

× INDE : –+– –+– +– ETLIB :

Letters large. Branch-hand opposite upright of E and space between D and E. Left lower corner of E in ET distant from pole-hand. B well clear of shield. Last colon low, the lower dot nearly all on shield. 25—b

Reverse c.

+–INDE : –+– –+– –+– ETLIB :

Crosby describes this die in combination with obv. 22. Hall did not succeed in finding it and authentic examples are lacking.

Reverse d.

* INDE : + + ETLIB :

Another die listed on Crosby's authority, but lacking later confirmation. Crosby combines it with obv. 26.

Reverse e.

+ INDE : ⊷ + ETLIB :

Branch-hand opposite D. Top leaf points at large dot of ornament. Wide spacing between TL. B distant from shield. Last colon low, the lower dot part on shield.

37^5—e. 37^9—e

Reverse f.

–+–INDE : + + –+– ET – LIB :

Crosby describes this die as reverse F of the draped busts of 1787 and combines it with obv. 24. We have met no specimens that exactly conform to it. Reverse FF is similar, but without hyphens to 4th cross.

Reverse g.

–+–INDE : –+– – +– –+– ET – LIB :

Var. 1. Letters small. Branch-hand opposite upright of E and space between D and E. Top leaf near second cross. Hyphen to right of third cross very distant from head. Hyphen to right of fourth cross near pole. Upper dot of both colons low. Lower dot of last colon half on shield. Liberty pole touches date-line midway between 1 and 7. 18—g[1]

Var. 2. Letters small. Branch-hand opposite E and space between D and E. Top of branch about level with right extremity of second cross. Lower line of L long. Pole touches date-line just above the left upper corner of first 7. Lower dot of last colon partly on shield. 22—g[2]

Var. 3. Letters small. Branch-hand opposite D. Top leaf of branch near hyphen to left of second cross. Hyphen to right of fourth cross joins the cross. A line unites the hyphen in ET—LIB with the right top of T. Lower dot of last colon very close to shield. 1 touches date line, other figures below it. 17—g[3]. 24—g[3]

Var. 4. Letters small. Branch-hand opposite right part of D. Top leaf points at left edge of second cross and is close to it. Hyphen to left of first cross touches figure just above the foot. Hyphen to left joins third cross. Hyphen to right of fourth cross touches pole and looks like a projecting finger. Lower dot of last colon touches shield. Upper date line the longer. Break below IN. Crack along bottom of date. 19—g[4]

Var. 5. Letters small. Branch-hand opposite D and space between D and E. Top of upper left touches colon-dot. Hyphen to right of first cross weak. Hyphen to left of fourth cross below plume. Last colon clear of shield. Light break from upper left corner of first E. 24—g[5]. 48—g[5]

Reverse h.

+ INDE : ✤–✤– × ET – LIB :

Var. 1. Branch-hand opposite D. Top of branch level with right edge of first colon, IN widely spaced. Lower curve of B light. 39[1]—h[1]

Var. 2. Top of branch near large dot of ornament. Letters in INDE about evenly spaced. 37[7]—h[2]

Reverse i.

+ INDE : ✤–✤– // ET – LIB : ×

Branch-hand opposite E. Branch points to large dot of ornament. Scroll nearly or quite touches head. Base line of I in LIB long. 37[3]—i

Reverse k.

// INDE : ✤–✤– // ET – LIB :

The legend of k is the same as that of reverse cc, except the final letter, which in reverse cc is an R.

Var. 1. Branch-hand opposite space between D and E. Top of branch opposite middle of space between colon and ornament. Foliage scanty. First scroll near foot of goddess. 37[4]—k[1]

Var. 2. Branch-hand opposite D and space between D and E. Upper leaf of branch partly on large dot of ornament. Period-like dot in field below the smaller fleuron of ornament. Last colon low, sloping to right, the lower dot almost all below B. 37^{8}—k^{2}

Var. 3. Upper leaf ends opposite centre of large dot. First scroll very near or touching goddess. Lower edge of last colon on same curve as bottom of adjacent B.

34—K^{3} 36—k^{3}

Var. 4. Top leaf unusually large and almost touching large dot. Right lower corner of B square and heavy, apparently altered from R. Last 7 low. Die broken on edge above ornament. 37^{6}—k^{4}

Var. 5. Branch-hand opposite upright of D and space between N and D. Branch ends opposite space between E and colon. No terminal leaf. Second leaf on right large and prominent. Second scroll almost touches head. 37^{2}—k^{5}

Reverse l.

◂◂ INDE : ◂◂◂ ◂◂ ET – LIB : ◂

Var. 1. Branch-hand opposite D. Top of branch just beyond first colon. B altered from R. Last fleuron touches shield. I high. Last 7 below line. 36—l^{1}

Var. 2. Branch-hand opposite space between D and E. Branch short and wide, pointing to large dot of ornament. B altered from R. Both 7's below date-line.

16^{3}—l^{2}. 33^{16}—l^{2}. 38—l^{2}

Reverse m.

* INDE * * * ET – LIB *

Large letters. Branch points to second star. Last star distant from B and close to shield. Stars with five blunt points. Wide date. 16^{1}—m. 25—m. 28—m

Reverse n.

* INDE : * * * ET – LIB :

Branch-hand opposite upright of D and space between N and D. Branch nearly or quite touches lower dot of colon. INDE and ET widely spaced. LIB rather close. Colon dots heavy. Lower dot of last colon touches shield. 16^{4}—n. 16^{5}—n. 28—n. 29—n

Reverse o.

* INDE * * ETLIB *

Branch-hand opposite D. Branch points at second star. Top leaf disconnected. INDE widely spaced. Letters large. LIB successively low.

Break through lower part of second E, also from left upper corner of L.

28—o. 29^{2}—o. 42—o

Reverse p.

* INDE * * * ETLIB *

First star close to foot. Last star touches shield and is usually weak. Specimens occur in which only faint traces of the star are found. ND widely spaced. LI very close at bottom. 16^{5}—p 29^{1}—p

Reverse q.

INDE : • • • • • ETLIB : •

Top leaf of branch disconnected to right. A line connects the corners of first E. IB successively low and close at bottom. Lower dot of last colon imperfect and touches shield.

Curved breaks from head to pole, and from pole-hand to cinquefoil and milling.

33^{4}—q 33^{13}—q 33^{19}—q 33^{43}—q

Reverse r.

• INDE : • • • • ET LIB :

Var. 1. Branch-hand opposite E. Branch points right of second cinquefoil. Third leaf on left disconnected. Bottom of L high, top leans to left. B struck over a cinquefoil. Lower dot of last colon close to, but clear of shield. In date 1 slants to left and is distant from 7. 33^{15}—r^{1} 33^{17}—r^{1}

Var. 2. Branch-hand opposite upright of E and space between D and E. Branch points right of second cinquefoil. Third leaf on right disconnected. B over a cinquefoil. Dots of colon close and heavy. Last colon sloping, the lower dot very close to B. Late impression show the B slightly open below. 33^{7}—r^{2}

Var. 3. Branch-hand opposite upright of E and space between D and E. Branch points at left edge of second cinquefoil. No additional spacing between ET and LIB. Upper dot of last colon low, the lower dot close to but clear of shield. In date 1 and first 7 encroach on date-line. Break along top of NDE to second cinquefoil; also from lower left corner of I. 31^{2}—r^{3}

Var. 4. Branch-hand opposite E. Branch points at centre of second cinquefoil. IB close at bottom. Dots of last colon touch each other, the lower dot half on shield. 31^{1}—r^{4} 33^{7}—r^{4} 33^{27}—r^{4}

Var. 5. Branch-hand opposite space between D and E. Branch points at centre of second cinquefoil and terminates near it. Third leaf on left close to colon-dot. Fourth cinquefoil nearer pole than head. Lower line of B prolonged to left of upright. B over a cinquefoil. Lower dot of last colon mostly below B and well clear of shield. Lower date-line lighter than upper and not continuous.

Die-crack through second, third and fourth cinquefoils to pole; another from knee of goddess through right side of first cinquefoil.

This very rare reverse is not found in Hall's printed list. In his later notes he records finding a specimen after twenty years search. 33^{17}—r^{5}

Reverse s.

• INDE : • • • • ET – LIB : •

Var. 1. Branch ends a little above second cinquefoil and points at border. First I low. E in ET leans to left. Second leaf on right of branch long.

Break from milling to front of head. Crack from milling through third cinquefoil. 33^{39}—s^{1}

Var. 2. Branch ends above second cinquefoil and points to border. Second leaf on left long. E in ET slightly high, the top leaning to left. Lower dot of last colon nearly all below B. First 7 of date encroaches on date-line.

Break from upper left corner of I. 33^{9}—s^{2}

Reverse u.

• INDE • • • ETLIB

Apparently re-cut from the die of reverse p, the stars having the appearance of trefoils. Letters all badly formed and double cut. Arm holding branch consists of two parallel lines. Date weaker than in reverse p and date-lines further apart.

Only one specimen known. 16^{5}—u

Reverse aa.

• FNDE . • • • • ETLIB . •

F punch used instead of I for first letter of legend. N double cut. Lower line of both E's long. Right arm of T too long, reaching nearly to top of L. In ETLIB T and I high. 32^{5}—aa. 32^{8}—aa

Reverse bb

× INDE : – + – – + – – + – ETLIB :

Crosby gives this reverse in the combination 26—*B*. With exception of the final R instead of B the legend is the same as reverse a. In some cases it is difficult to determine whether the final letter should be described as B or R. As well defined examples of this reverse do not seem to occur, it is probably a duplication of reverse a.

Reverse cc.

INDE : ET-LIR :

Legend the same as reverse k, except final letter.

Var. 1. Branch-hand opposite D and space between D and E. Top leaf points at large dot of ornament. First scroll clear of goddess. IR successively low. The final R looks somewhat like an open B, the tail not curving to right. 37^{1}—cc^{1}

Var. 2. Branch-hand entirely opposite D. Top leaf points to large dot and terminates a little above the colon. ET on higher plane than LIR. R like open B. Lower dot of last colon all below R. 37^{14}—cc^{2}

Reverse dd.

INDE : ET-LIR :

Crosby combines this reverse—his *D*—with obverse 37. The legend is identical with reverse HH except the final letter. Compare remark under reverse bb.

Reverse ee.

INDE : ET-LIR :

Branch-hand opposite D and space between D and E. Top leaf points to large dot and terminates near it. Lower dot of last colon between tail of R and shield, and close to both. 39^{2}—ee

Reverse ff.

◂◂ INDE : ◂◂ ▸▸ ◂◂ ET-LIR : ◂

Legend same as reverse l, except final letter.

Var. 1. Top of highest leaf above right edge of colon. Index finger of pole-hand long and prominent. Second E touches pole-hand. Tail of R sharp. Lower dot of last colon mostly below R. Lower date-line broken above figure 1. 33^{13}—ff^{1}. 34—ff^{1}

Var. 2. Top of highest leaf opposite right edge of first colon. Fleurons right of head nearly unite. E distant from pole-hand. In ETLIR T high and R low. Last fleuron touches shield. 36—ff^{2} 37^{11}—ff^{2} 39^{1}—ff^{2}

Reverse gg.

• INDE : • • • ETLIR : •

Legend same as in reverse T except final letter.

Var. 1. First cinquefoil high. Lower dot of first colon near prominent leaf on left of branch. Last cinquefoil touches shield.

Break from fourth cinquefoil to milling. In some combinations there is a break from waist to D and thence to left to N. 31^{1}—gg^{1} 33^{11}—gg^{1} 33^{20}—gg^{1} 33^{38}—gg^{1}

Var. 2. Leaves of branch distant from first colon. T high. Last cinquefoil well separated from shield.

Break from shield through last cinquefoil and above IR to milling.

33^{17}—gg^{2}. 33^{31}—gg^{2}

Reverse hh.

• INDE : • • • • ETLIR : •

Legend the same as in reverse Z except final R instead of B.

Var. 1. The three cinquefoils after INDE about equidistant. Last cinquefoil partly on shield. Tail of R sharp and close to lower dot of colon. Last colon very low, the lower dot part on shield.

Die-cracks from foot along top of IND; from milling across shield; from date line through date. 30—hh^{1}

Var. 2. Wider spacing between third and fourth cinquefoils than between second and third. Last colon and last cinquefoil clear of shield. Base line of first E touches lower dot of colon. Tail of R short. All figures below line.

33^{13}—hh^{2}. 33^{23}—hh^{2}. 33^{43}—hh^{2}

Reverse ii.

• INDE : • • • ETIIB :

Leaves of branch irregular. Nine on left side opposite colon. A short line extends to left from top leaf. Last colon weak, the lower dot partly on shield.

A slight crack from bottom of first I in IIB to upper sash-end. 41—ii

Reverse kk.

• INDE : • • • ETIIB : •

Var. 1. Branch-hand mostly opposite space between D and E. Lower dot of last colon partly on shield. Last star distance from colon. 26—kk^{1}. 40—kk^{1}

Var. 2. Branch-hand opposite E. Lower dot of last colon well separated from shield. Last star near colon. 42—kk²

Reverse AA.

* INDE : + – + + ETLIB :

Letters large. Branch-hand opposite upright of E. Branch points between the arms of second cross. Hyphen to right touches third cross. TL close at top. B partly on shield. Lower dot of last colon entirely on shield. Pointed end of upper sash opposite upright of T. 26—AA

Reverse BB.

× INDE : + –+– + ETLIB •

Letters large. Branch points at lowest part of second cross. Branch hand opposite right part of E. B partly on shield. Period close to shield. 46—BB

Reverse CC.

+ INDE : –⁎ – ⁎– –+– ET LIB :

Letters small. Top of branch opposite centre of first colon. Last colon clear of shield. Last 7 below date-line. 45—CC

Reverse DD.

–+–INDE : + –+– –+– ET-LIB :

Hyphen to left of first cross distant from goddess, the one to right touches the cross. Hyphen between ET and LIB joins the right top of T. Branch-hand opposite space between D and E. Top leaf points to second cross and is close to it. Lower dot of last colon touches shield. All figures touch date-line. 21—DD

Reverse EE.

• INDE : • – • – – • ET-LIB : •

Branch-hand opposite right part of D and space beyond it. Top of branch touches lower dot of first colon. Cinquefoils rather distant from colons. D low. 33³⁰—EE

Reverse FF.

–+–INDE : + + + ET-LIB :

Letters small. Branch-hand opposite D. Top of upper leaf opposite centre of colon. Lower dot of last colon clear of shield. 1 and both 7's below date line. Slight break from E in ET to edge. 24—FF. 53—FF

Reverse GG.

–+–INDE : –+ = +– –+– ET-LIB :

Letters small. Branch-hand opposite D and space between ND. Branch has twelve leaves arranged in triplets. Top leaf points at lower dot of first colon. Two hyphens between second and third cross, the upper one sometimes weak. Hyphen to right joins fourth cross. Wide spacing in IND. 38—GG

Reverse HH.

•⁎ INDE : ⁎•⁎• • ET-LIB : ⁎

Legend the same as dd except final letter.

Branch-hand opposite space between ND. Top leaf very close to lower right corner of E. Hyphen in ET-LIB short. Lower line of B weak, in most specimens making the

B look like R. This circumstance doubtless explains Crosby's reverse *D*, which has been retained in this list as dd. Unless some other difference should be discovered in the dies the reverse dd should be eliminated. 37^{13}—IIII 37^{8}—IIII

Reverse II.

• [INDE • • • • ETLIB •

Legend has six cinquefoils without other punctuation. INDE widely spaced. Letters in ETLIB irregular, the E and B low. B from altered R punch. Date-line triple.

Break from milling between third and fourth cinquefoils.

33^{22}—II. Ryder Collection. Unique

Reverse KK.

• INDE : • • • ET LIB : •

First E altered from an F. Lower part of L imperfect, probably altered from an I. First colon inclines to right, the dots large and well spaced. Figure 1 low leaning to left. Lower date-line defective. 33^{6}—KK

Reverse LL.

• INDE : • • • ET • I IB : •

Stars with blunt rays. Upper leaf on left of branch close to colon. Wide spacing between II. Corner of E touches pole-hand. A short line just right of the space between the dots of the first colon. 37^{8}—LL. 37^{12}—LL

Reverse NN.

• INDE : • • • ET • LIB :

Stars with blunt rays. Legend similar to reverse N, except period substituted for hyphen in ET.LIB.

Var. 1. Branch points left of second star. Second leaf on left points at lower left corner of E. Top of E in ET above top of T. Last colon slopes to right, the lower dot small and near shield. The date-lines heavy and merging together at both ends. 16^{2}—NN^{1}

Var. 2. Branch points at centre of second star. Third leaf on left points at upright of E. Top of E in ET about in line with top of T. LIB low. Lower dot of last colon more distant from shield than in Var. 1. Date-line quadruple, the lowest line light and running through the tops of the figures. Small 8 in date. 16^{6}—NN^{2}

Reverse RR

•• INDE : •• ET-LIB : •

Branch-hand opposite space between D and E. Top leaf points at centre of large dot. B low and apparently altered from R. Tip of last fleuron touches shield. In date 1 high, last 7 low. 37^{7}—RR. 37^{10}—RR

Reverse SS

• INDE : • • — — • ET • LIB : •

Cinquefoils heavy. Top leaf points at lower dot of first colon. Lower left corner of E in ET above opposite wrist of pole-arm. First I high, leaning to left. T high. Last 7 below date-line. 33^{30}—SS. 33^{36}—SS

Reverse TT.

–•–INDE : • • –• – ETLIB : •

Dr. Hall describes this reverse as follows: "Specimens examined four. Traces of other hyphens. Bottoms of I and N in same curve. Wide spacing in IND. Branch points at lower period of first colon. Branch-hand opposite upright of D and space between N and D. Hyphen to right connects with fourth cinquefoil. Cinquefoils heavy."

37^{12}—TT

Reverse VV.

INDE ETLIB •

Branch-hand opposite lower right corner of E. From Dr. Hall's later notes.

1^{1}—VV

Reverse WW.

ET LIB INDE •

Liberty reversed, holding staff with Liberty Cap in right hand, branch in left. Dr. Hall's later notes.

1^{4}—WW

1788 — OBVERSE

Obverses 1 to 6 inclusive have mailed busts facing right.
Obverses 7 to 13 inclusive have mailed busts facing left.
Obverses 14 to 17 inclusive have draped busts.

Obverse 1.

AUCTORI CONNEC

Smallest head of the year. Same as obv. 1 of 1787. .1—I (R^{6})

Obverse 2.

• AUCTORI • CONNEC •

Stars with five sharp points. Period distant from I. Break connects first star with foot of A. Later breaks from lower left corner of mail to border, from top of wreath to border and from last star to milling. 2—D (R^{2})

Obverse 3.

• AUCTORI • • CONNEC •

Var. 1. Stars with six points. First star double cut. Top of wreath projects considerably above head. Last star near mail. 3^{1}—B^{1} (R^{5})

Var. 2. Similar to Var. 1 but no double cutting of first star. 3^{2}—B^{2} (R^{5})

Obverse 4.

AUCTORI • • CONNEC •

Var. 1. Stars with six points. First star over head. Second star near top leaf of wreath. CONNEC widely spaced. 4^{1}—B^{1} (R^{5}). 4^{1}—K. (R^{4})

Var. 2. Second star about midway between top leaf of wreath and C. First C in CONNEC low. 4^{2}—R (R^{6})

Obverse 5.

* AUCTORI * * CONNEC *

Stars with six points. First star close to both mail and A. Tail of R joins base of I. NN widely spaced. 5—B² (R⁵)

Obverse 6.

AUCTORI * * CONNEC *

Stars with six points. Stars distant from letters. Tail of R heavy and well separated from base of I. Break or imperfection in die, connecting lips with chin. A rare variety seldom obtainable in good condition. 6—H (R⁶)

Obverse 7.

* AUCTORI. * * CONNEC *

In this and the five following obverses the mailed bust faces left. Stars with five blind points. First and last stars touch mail. Twelve leaves in triplets. A slopes to left. NN wide. Curved break from lowest curl. 7—E (R⁴). 7—F (R⁶). 7—K (R⁵)

Obverse 8.

AUCTORI. * CONNEC *

Twelve leaves in triplets. Period after I close to forehead. Defect, resembling a misplaced period, on the lower curve of final C. CONNEC weak, the die showing injury. Same die as obv. 12 of 1787. 8—K. (R⁵)

Obverse 9.

AUCTORI CONNEC *

Star with six sharp points. Wreath with seven outlined leaves. Some specimens show tops of two 8's incused above head near upper leaf. Coarse, serrated milling. 9—E. (R⁴)

Obverse 10.

AUCTORI * * CONNEC *

Stars with six points. In obverse 6 which has the same legend the bust faces right and the features and style of bust are quite different. 10—C. (R⁵)

Obverse 11.

* AUCTORI * CONNEC *

Stars with six points. First star near A. Point of second star barely touches head. Last star distant from C and mail. 11—G (R²)

Obverse 12.

* AUCTORI * * CONNEC *

Same punctuation as in Obv. 7 except that stars have six instead of five points.

Var. 1. First star midway between A and mail. Third star partly in head. Three berries in wreath. Short line from lower fillet-end. When connected with Rev. E this die is generally found badly shattered on the head and in both fields.

12¹—E(R³). 12¹—F (R³)

Var. 2. First star near A. Third star clear of head. No berries in wreath.
12^2—C (R^3). 12^2—E (R^3)

Obverse 13.

• AUCTORI • • CONNLC •

AU widely spaced. Last C large and low. Last cinquefoil distant from C.
13—A^1 (R^4)

Obverse 14.

• AUCTORI • • CONNEC •

Draped bust facing left.

Var. 1. First cinquefoil near point of bust, its upper edge about in line with the top of A. Second cinquefoil to left of hair. Last cinquefoil connects C with toga. Most letters closely spaced. C touches head. 14^1—L^2 (R^4)

Var. 2. First cinquefoil opposite middle of A. Second cinquefoil entirely above hair. Last cinquefoil between the ends of the toga. Legend widely spaced. C in CONNEC clear of head. 14^2—A^2 (R^4)

Obverse 15.

• AUCTORI • • CONNEC. •

Draped bust facing left.

Var. 1. Third cinquefoil close to head and much nearer to C than to wreath. Last cinquefoil between ends of toga. Lower fillet-end points to period, which is a little nearer C than toga. Scratches in die extending downward from tail of R and base of I. Break from nose along left edge of O. 15^1—L^1 (R^4)

Var. 2. Third cinquefoil rather nearer to wreath than to C. Last cinquefoil partly above end of toga and midway between period and toga. Period opposite upper fillet-end. Break from milling touching final C. 15^2—P (R^4)

Var. 3. First cinquefoil high, nearly half under and distant from bust. A small and low. CT wide. C very close to head, O more distant. EC close. Break from milling through left part of final C as in 15^2. Only known specimen in poor condition. Canfield collection. 15^3—P (R^6)

Obverse 16.

• AUCTORI. • • CONNEC. •

Draped bust facing left.

Var. 1. First cinquefoil high, partly under bust. Second cinquefoil distant from period and hair. Third cinquefoil nearer C than wreath. Last cinquefoil near end of toga and partly above it. Last period below fillet-ends. O in CONNEC distant from head. CO rather widely spaced.

Good specimens show an additional cinquefoil, probably accidental, within the drapery near the centre of its lower edge. 16^1—D (R^2). 16^1—H (R^2)

Var. 2. Cinquefoil large. First low, entirely left of bust. Second and third near wreath. Last cinquefoil high, partly above end of toga. Last period opposite upper fillet-end and mostly below C. C clear of head, O rather distant. NN widely spaced.
16^2—O (R^4)

Var. 3. First cinquefoil high, about half under bust. Second distant from hair, partly above it. Third nearer C than wreath. Last cinquefoil distant from toga, close to border. First period partly below I. Upper fillet-end points to last period. First C large and high. AUC more widely spaced than following letters. C partly on head, O close, leaning to left. Break from toga to a point near lower fillet-end. 16^3—N (R^2)

Var. 4. First cinquefoil a trifle high, entirely left of bust. Second distant to left of wreath. Third high, distant from O and wreath. Last cinquefoil nearer colon than toga. Both periods below letters. C touches head, O rather distant from head and C. 16^4—L^2 (R^4)

Var. 5. Letters small and light. First cinquefoil about half under and touching bust. RI more widely spaced than other letters of AUCTORI. First period small and distant from base of I. Third cinquefoil much nearer C than wreath. C just touches head, O not so close as in 16^6, but closer than in 16^1. Letters in CONNEC irregular, the first N high, the C low. Lower fillet-end points at last cinquefoil. 16^5—H (R^4)

Var. 6. The die of 16^5 recut. Letters much heavier, the I especially thick and badly shaped. R and I closer than in 16^5. First period close to base of I. Last period close to final cinquefoil. Lower part of C on head, O very close. Lower fillet-end opposite last colon. 16^6—H (R^5)

Obverse 17.

• AUCTORI. • • CONNLC. •

Draped bust facing left. First cinquefoil entirely left of bust and rather near A. Last cinquefoil between ends of toga. Both fillet-ends opposite final C. First C in CONNEC clear of head. Final C low. Last period below fillet-ends and close to end of toga. 17—O (R^5). 17—Q (R^5)

1788 — REVERSE

Reverse A.

• INDE • ET • • • LIB •

Var. 1. D large and extending above the other letters in INDE. Leaves of branch crude. No top leaf. A small twig from top of stem points to lower right corner of E. ET close.

Break downward from knee touching I and first cinquefoil. 13—A^1

Var. 2. Bottom of D below that of E. Leaves better formed. Top leaf just below the middle of the base line of E. ET and LIB widely spaced. In date 78 low. 14^2—A^2

Reverse B.

INDE • ET LIB •

Var. 1. Star after INDE low. Branch-hand opposite right part of E. Second leaf on left points to the star. In date both 8's slant to right. Heavy serrated milling. 3^1—B^1. 4^1—B^1

Var. 2. D wide. Branch-hand opposite E. Second leaf on left points to lower right corner of E in INDE. In date 1 distant from 7. 3^2—B^2. 5—B^2

Reverse C.

INDE * ET LIB *

Branch-hand opposite right part of D and space between D and E. Top of branch points to right of first star. 1 and last 8 encroach on date-line.

Break from last cinquefoil downward to edge opposite lower part of shield.

10—C. 12^2—C

Reverse D.

INDE * ET * LIB *

Branch-hand points at first star. Top of branch points at base of T.

Breaks at E in ET, and I in LIB. Also later at foot of Liberty and from B to shield.

2—D. 16^1—D

Reverse E.

INDE * ET * * LIB *

Branch-hand opposite E. Branch points to lower left corner of E in ET. Branch curve of shield and from last cinquefoil to milling. 6—H. 16^1—H, 16^5—H, 16^6—H

Reverse F.

INDE * ET * * LIB *

First star near E in ET. Third star between head and pole. Last star low. Branch points at edge of first star. A line parallel to the upright joins the left corners of B.

7—F. 12^1—F

Reverse G.

INDE * ET * * LIB *

Branch-hand opposite space between D and E. Branch short pointing to edge of star. Third star between pole-hand and L. Both 8's slope to right. 11—G

Reverse H.

* INDE. * * * ETLIB. *

Branch-hand opposite D. Branch points at first period. Fourth cinquefoil between head and pole. INDE widely spaced. ETL close. 7 low. Die-cracks occur from D to a point below knee of goddess, thence downward to edge; along top of ETL; through lower narrow with small leaves. Coarse milling. 7—E. 9—E. 12^1—E. 12^2—E

Reverse I.

INDE × ET • LIB ×

TL widely spaced. Same die as Crosby's reverse B of the Vermont cent of 1788.

1—I

Reverse K.

* INDE * ET * LIB *

First star much nearer to I than to foot. Star between T and L close to both letters. First I imperfect at top. Branch ends opposite right corner of E. 4^1—K. 7—K. 8—K

Reverse L.

• INDE • ET • • LIB. •

Var. 1. First cinquefoil near foot; third between head and pole; last close to lower part of shield. Branch broad. Top leaf opposite middle of upright of E in ET. Two bow-strings below hair puff. LIB wide. 15^1—L^1

Var. 2. First cinquefoil about equidistant from foot and I. Second cinquefoil low, opposite face. Top leaf near upper left corner of E in ET. One leaf on right touches lower left corner of same E. E low in INDE, high in ET. Last period distant from B. 78 low. No bow-strings. 14^1—L^2. 16^4—L^2

Reverse M.

INDE • ET • • • LIB. •

Crosby gives this reverse combined with Obv. 15. Have met with no specimens.

Reverse N.

• IN DE. • • • • ETLIB. •

Branch-hand opposite D and space to left. Top leaf points at first period. Last period half on shield. 8's high and widely spaced.

Occasional specimens are found on large planchets, the dies showing wear. On these pieces the periods are elongated and the lettering fine and irregular. The pole-hand and parts of the date-line are lacking. 16^3—N

Reverse O.

• INDL. ET • • • • LIB. •

Branch-hand mostly opposite space between L and period. Top leaf ends between E and T. Last cinquefoil distant from period and shield. Bow-strings below hair-puff. Pole has Liberty cap. 16^2—O. 17—O

Reverse P.

• INDE • ET • • • • LIB. •

Branch-hand opposite period. Top-leaf points at T. Last cinquefoil distant from period and near shield. 15^2—P. 15^3—P

Reverse Q.

• INDE • ET • • • LIB. •

Branch-hand opposite space between E and period. Two bow-strings below hair-puff. A plume curves downward and backward from top of hair-puff.

Irregular break from lower right corner of E in INDE to first cinquefoil. 17—Q

Reverse R.

× INDE * * ET * LIB *

Top of upper leaf of branch about opposite lower right corner of D. Specimens too poor for better description. 4^2—R

LIST OF VARIETIES AND COMBINATIONS.

1785

Obv.	Rev.	Rarity	Obv.	Rev.	Rarity	Obv.	Rev.	Rarity
1	E	R4	3[5]	K[2]	R5	6[2]	F[1]	R4
2	A[1]	R3	4[1]	F[4]	R1	6[3]	G[1]	R3
2	A[4]	R3	4[2]	F[4]	R6	6[3]	G[2]	R4
3[1]	A[3]	R3	4[3]	A[2]	R3	6[4]	F[5]	R5
3[1]	L	R4	4[3]	D	R4	6[4]	I	R3
3[2]	L	R3	4[4]	C	R4	6[4]	K[1]	R5
3[3]	F[3]	R4	4[4]	D	R4	6[5]	M	R5
3[4]	F[1]	R3	5[1]	F[5]	R4	7	D	R5
3[4]	F[2]	R3	5[2]	F[5]	R4	8	D	R6
3[5]	B	R2	6[1]	A[1]	R3			

1786

Obv.	Rev.	Rarity	Obv.	Rev.	Rarity	Obv.	Rev.	Rarity
1	A	R4	5[3]	B[2]	R6	5[8]	O[2]	R3
2[1]	A	R3	5[3]	G	R5	5[9]	B[1]	R4
2[1]	D[3]	R6	5[3]	N	R3	5[9]	Q	R5
2[2]	D[2]	R5	5[4]	G	R2	5[10]	L	R4
3	D[1]	R4	5[4]	N	R6	5[10]	P	R5
3	D[4]	R6	5[4]	O[1]	R2	5[11]	R	R5
4[1]	G	R2	5[5]	M	R3	5[12]	L	R6
4[2]	R	R5	5[6]	M	R5	6	K	R5
5[1]	H[1]	R5	5[7]	H[1]	R4	7	K	R6
5[2]	H[1]	R5	5[7]	O[2]	R5	8	O[1]	R6
5[2]	I	R3	5[8]	F	R5			
5[2]	O[2]	R5	5[8]	H[2]	R5			

1787

Obv.	Rev.	Rarity	Corresponding Numbers in Hall	Obv.	Rev.	Rarity	Corresponding Numbers in Hall	Obv.	Rev.	Rarity	Corresponding Numbers in Hall
1[1]	A	R3	1[1]-A	8	N	R3	8-N	15	F	R3	15-F*
1[1]	VV	R6	(1[1]-VV)	8	O	R3	8-O	15	R	R6	15-R
1[2]	C	R3	1[2]-C	9	D	R4	9-D	15	S	R5	15-S
1[3]	L	R4	1[3]-L	9	E	R4	9-E	16[1]	m	R3	16[1]-M[1]
1[4]	WW	R6	(1[4]-WW)	9	R	R5	9-R	16[2]	NN[1]	R4	16[2]-NN
2	B	R3	2-B	10	E	R5	10-E	16[3]	I[2]	R4	16[3]-L[1]-2
3	G	R5	3-G	11[1]	E	R3	11[1]-E	16[4]	n	R4	16[4]-N[1]
4	L	C	4-L	11[2]	K	R3	11[2]-K	16[5]	n	R3	16[5]-N[1]
5	P	R6	5-P	11[3]	K	R6	——	16[5]	p	R5	——
6[1]	M	R1	6[1]-M	12	Q	R4	12-Q	16[5]	u	R6	——
6[2]	M	R3	6[2]-M	13	D	R3	13-D	16[6]	NN[2]	R6	——
7	I	R4	7-I	14	H	R3	14-H	17	g[3]	R3	17-G[1]-3

1787

Obv.	Rev.	Rarity	Corresponding Numbers in Hall	Obv.	Rev.	Rarity	Corresponding Numbers in Hall	Obv.	Rev.	Rarity	Corresponding Numbers in Hall
18	g^{1}	R^{3}	18-G^{1}-1	33^{7}	r^{2}	C	33^{7}-R^{1}-2	33^{29}	Z^{7}	R^{4}	33^{38}-Z-7
19	g^{4}	R^{2}	19-G^{1}-4	33^{7}	r^{4}	R^{6}	33^{7}-R^{1}-4	33^{29}	gg^{1}	R^{4}	33^{38}-G^{2}-1
20	a^{2}	R^{3}	20-A^{1}-2	33^{7}	Z^{10}	R^{6}	33^{7}-Z-10	33^{30}	EE	R^{5}	33^{39}-EE
21	DD	R^{4}	54-DD	33^{8}	Z^{13}	R^{4}	33^{8}-Z-13	33^{30}	SS	R^{6}	33^{39}-SS
22	g^{2}	R^{5}	22-G^{1}-2	33^{8}	Z^{19}	R^{5}	33^{8}-Z-19	33^{31}	gg^{2}	R^{5}	33^{37}-G^{2}-2
24	g^{3}	R^{4}	24-G^{1}-3	33^{9}	s^{2}	R^{2}	33^{1}-S^{1}-2	33^{32}	Z^{13}	R^{1}	33^{35}-Z-13
24	g^{5}	R^{4}	24-G^{1}-5	33^{10}	Z^{7}	R^{5}	33^{4}-Z-7	33^{33}	Z^{3}	R^{4}	33^{30}-Z-3
24	FF	R^{6}	24-FF	33^{10}	Z^{8}	R^{4}	33^{4}-Z-8	33^{33}	Z^{11}	R^{3}	33^{30}-Z-11
25	b	R^{3}	25-B^{1}	33^{10}	W^{6}	R^{6}	——	33^{34}	W^{2}	R^{5}	33^{31}-W-2
25	m	R^{5}	25-M^{1}	33^{11}	Z^{18}	R^{5}	33^{15}-Z-18	33^{34}	Z^{3}	R^{5}	33^{31}-Z-3
26	a^{1}	R^{5}	26-A^{1}-1	33^{11}	gg^{1}	R^{5}	33^{15}-G^{2}-1	33^{34}	Z^{11}	R^{5}	33^{31}-Z-11
26	kk^{1}	R^{4}	26-K^{2}-1	33^{12}	W^{5}	R^{5}	33^{14}-W-3	33^{35}	Z^{9}	R^{6}	33^{41}-Z-9
26	AA	R^{3}	26-AA	33^{12}	Z^{16}	R^{3}	33^{14}-Z-16	33^{36}	T^{1}	R^{3}	33^{33}-T-1
27	a^{1}	R^{5}	27-A^{1}-1	33^{12}	Z^{21}	R^{5}	33^{14}-Z-21	33^{36}	T^{2}	R^{1}	33^{33}-T-2
28	m	R^{3}	28-M^{1}	33^{12}	Z^{24}	R^{6}	33^{14}-Z-24	33^{36}	SS	R^{6}	33^{33}-SS
28	n	R^{5}	28-N^{1}	33^{13}	Z^{1}	R^{5}	33^{11}-Z-1	33^{37}	Z^{9}	R^{3}	33^{32}-Z-9
28	o	R^{6}	——	33^{13}	Z^{6}	R^{4}	33^{11}-Z-6	33^{38}	Z^{1}	R^{3}	33^{36}-Z-1
29^{1}	a^{2}	R^{5}	29-A^{1}-2	33^{13}	Z^{7}	R^{4}	33^{11}-Z-7	33^{38}	Z^{6}	R^{4}	33^{38}-Z-6
29^{1}	n	R^{6}	29-N^{1}	33^{13}	q	R^{5}	33^{11}-Q^{1}	33^{38}	Z^{18}	R^{6}	——
29^{1}	p	R^{4}	29-P^{1}	33^{13}	ff^{1}	R^{6}	33^{11}-F^{2}-1	33^{38}	Z^{23}	R^{5}	33^{35}-Z-23
29^{2}	N	R^{6}	——	33^{13}	hh^{2}	R^{6}	33^{11}-H^{2}-2	33^{38}	gg^{1}	R^{5}	33^{36}-G^{2}-1
29^{2}	o	R^{5}	51-O^{1}	33^{14}	Z^{14}	R^{3}	33^{17}-Z-14	33^{39}	Z^{20}	R^{6}	33^{34}-Z-20
30	hh^{1}	R^{2}	30-H^{2}-1	33^{15}	r^{1}	R^{1}	33^{5}-R^{1}-1	33^{39}	s^{1}	C	33^{34}-S^{1}-1
30	X^{1}	R^{3}	30-X-1	33^{16}	l^{2}	R^{4}	33^{6}-L^{1}-2	33^{40}	Z^{1}	R^{5}	33^{29}-Z-1
31^{1}	gg^{1}	R^{3}	31^{1}-G^{2}-1	33^{16}	T^{2}	R^{6}	——	33^{40}	Z^{2}	R^{5}	33^{29}-Z-2
31^{1}	r^{4}	R^{1}	31^{1}-R^{1}-4	33^{16}	Z^{15}	R^{1}	33^{6}-Z-15	33^{41}	Z^{11}	R^{6}	33^{40}-Z-11
31^{2}	r^{3}	C	31^{2}-R^{1}-3	33^{17}	r^{1}	R^{3}	33^{13}-R^{1}-1	33^{42}	Z^{2}	R^{6}	33^{50}-Z-2
32^{1}	X^{3}	R^{2}	32^{1}-X-3	33^{17}	r^{5}	R^{6}	(33^{18}-R^{1}-5)	33^{43}	q	R^{4}	33^{44}-Q^{1}
32^{2}	X^{1}	C	32^{2}-X-1	33^{17}	gg^{2}	R^{2}	33^{18}-G^{2}-2	33^{43}	hh^{2}	R^{4}	33^{44}-H^{2}-2
32^{2}	X^{2}	R^{1}	32^{2}-X-2	33^{18}	Z^{24}	R^{6}	——	33^{44}	W^{3}	R^{5}	33^{45}-W-3
32^{2}	X^{4}	R^{5}	32^{2}-X-4	33^{19}	Z^{1}	C	33^{19}-Z-1	33^{45}	W^{2}	R^{5}	33^{46}-W-2
32^{3}	X^{4}	C	32^{3}-X-4	33^{19}	Z^{2}	R^{3}	33^{19}-Z-2	34	k^{3}	R^{6}	34-K^{1}-3
32^{4}	X^{5}	R^{4}	32^{4}-X-5	33^{19}	q	R^{5}	33^{19}-Q^{1}	34	ff^{1}	R^{3}	34-F^{2}-1
32^{4}	Z^{3}	R^{5}	32^{4}-Z-3	33^{20}	Z^{9}	R^{4}	33^{2}-Z-9	36	k^{3}	R^{5}	36-K^{1}-3
32^{5}	aa	R^{3}	32^{5}-A^{2}	33^{20}	Z^{11}	R^{6}	——	36	l^{1}	R^{3}	36-L^{1}-1
32^{6}	X^{6}	R^{5}	32^{6}-X-6	33^{21}	Z^{13}	R^{6}	(33^{20}-Z-13)	36	ff^{2}	R^{5}	36-F^{2}-2
32^{7}	X^{1}	R^{5}	32^{7}-X-1	33^{22}	H	R^{3}	——	37^{1}	cc^{1}	R^{2}	37^{4}-C^{2}-1
32^{8}	aa	R^{5}	32?-A^{2}	33^{23}	Z^{4}	R^{2}	33^{21}-Z-4	37^{2}	k^{5}	R^{3}	37^{12}-K^{1}-5
33^{1}	Z^{13}	R^{4}	33^{16}-Z-13	33^{23}	hh^{2}	R^{5}	33^{21}-H^{2}-2	37^{3}	i	R^{2}	37^{9}-I^{1}
33^{1}	Z^{19}	R^{5}	33^{16}-Z-19	33^{24}	Z^{10}	R^{6}	33^{22}-Z-10	37^{4}	k^{1}	R^{1}	37^{8}-K^{1}-1
33^{2}	Z^{5}	C	33^{12}-Z-5	33^{25}	Z^{10}	R^{4}	33^{25}-Z-10	37^{4}	RR	R^{6}	——
33^{2}	Z^{12}	C	33^{12}-Z-12	33^{25}	Z^{24}	R^{5}	33^{25}-Z-24	37^{5}	e	R^{2}	37^{7}-E^{1}
33^{2}	Z^{17}	R^{4}	33^{12}-Z-17	33^{25}	W^{3}	R^{5}	33^{25}-W-3	37^{6}	k^{4}	R^{4}	37^{11}-12^{1}-4
33^{2}	Z^{21}	R^{5}	33^{12}-Z-21	33^{26}	W^{3}	R^{5}	33^{26}-W-3	37^{6}	B	R^{6}	37^{11}-B
33^{2}	Z^{22}	R^{4}	33^{12}-Z-22	33^{26}	W^{5}	R^{6}	33^{26}-W-5	37^{7}	h^{2}	R^{5}	37^{13}-H^{1}-2
33^{3}	W^{1}	R^{3}	33^{6}-W-1	33^{27}	r^{4}	R^{4}	33^{25}-R^{1}-4	37^{8}	k^{2}	R^{2}	37^{5}-K^{1}-2
33^{4}	q	R^{4}	33^{18}-Q-1	33^{27}	Z^{16}	R^{6}	33^{23}-Z-16	37^{8}	HH	R^{3}	37^{5}-HH
33^{4}	Z^{2}	R^{5}	33^{18}-Z-2	33^{28}	Z^{11}	R^{6}	33^{24}-Z-11	37^{8}	LL	R^{3}	37^{5}-LL
33^{5}	T^{2}	R^{3}	33^{9}-T-2	33^{28}	Z^{16}	R^{3}	33^{24}-Z-16	37^{9}	e	R^{3}	37^{6}-E^{1}
33^{6}	KK	R^{1}	33^{10}-KK	33^{28}	Z^{20}	R^{6}	33^{24}-Z-20	37^{10}	RR	R^{4}	37^{10}-RR

1787

Obv.	Rev.	Rarity	Corresponding Numbers in Hall	Obv.	Rev.	Rarity	Corresponding Numbers in Hall	Obv.	Rev.	Rarity	Corresponding Numbers in Hall
37[11]	ff[2]	R[3]	37[2]-F[2]-2	40	N	R[5]	40-N	46	BB	R[4]	46-BB
37[12]	LL	R[4]	37[1]-LL	40	kk[1]	R[5]	40-K[2]-1	47	a[3]	R[5]	47-?
37[12]	TT	R[5]	37[1]-TT	41	ii	R[3]	41-I[2]	48	g[5]	R[5]	48-G[1]-5
37[13]	HH	R[2]	37[3]-HH	42	o	R[6]	42-O[1]	49	Z[1]	R[5]	49-Z-[1]
37[14]	cc[2]	R[6]	37[14]-C[2]-2	42	kk[2]	R[2]	42-K[2]-2	50	F	R[5]	50-F*
38	GG	R[2]	38-GG	43	Y	C	43-Y	(29[2]	o)		51-O[1]
38	I[2]	R[3]	38 L[1]-2	44	W[4]	R[2]	44-W-4	52	G	R[6]	52-G
39[1]	h[1]	R[5]	39[1]-H[1]-1	44	W[5]	R[5]	44-W-5	53	FF	R[4]	53-FF
39[1]	ff[2]	R[5]	39[1]-F[2]-2	44	Z[10]	R[5]	44-Z-10	(21	DD)		54-DD
39[2]	ee	R[4]	39[2]-E[2]	45	CC	R[4]	45-CC	55	F	R[6]	(55-F*)

1788

Obv.	Rev.	Rarity	Obv.	Rev.	Rarity	Obv.	Rev.	Rarity
1	I	R[6]	8	K	R[5]	15[2]	P	R[4]
2	D	R[2]	9	E	R[4]	15[3]	P	R[6]
3[1]	B[1]	R[5]	10	C	R[5]	16[1]	D	R[2]
3[2]	B[2]	R[5]	11	G	R[2]	16[1]	H	R[2]
4[1]	B[1]	R[5]	12[1]	E	R[3]	16[2]	O	R[4]
4[1]	K	R[4]	12[1]	F	R[3]	16[3]	N	R[2]
4[2]	R	R[6]	12[2]	C	R[3]	16[4]	L[2]	R[4]
5	B[2]	R[5]	12[2]	E	R[3]	16-5	H	R[4]
6	H	R[6]	13	A[1]	R[4]	16-6	H	R[5]
7	E	R[4]	14[1]	L[2]	R[4]	17	O	R[5]
7	F	R[5]	14[2]	A[2]	R[4]	17	Q	R[5]
7	K	R[5]	15[1]	L[1]	R[4]			

NOTE

IT seems fitting that the foregoing should not be published without an expression of the loss which numismatists feel at the untimely death of the author, Mr. Henry Clay Miller, on February 6th, 1920. The preparation of the material was a great pleasure to Mr. Miller. The completed work shows the painstaking and systematic manner in which the task was done. The final manuscript revision was finished but a short time before Mr. Miller's sudden death. Some slight errors have possibly occurred in the printed pages through not having had the benefit of the Author's proof reading.



2—A[1]



3[1]—L



3[4]—F[2]



4[1]—F[4]



4[3]—A[2]



5[1]—F[5]



6[1]



6[2]—F[1]



6[3]



6[5]



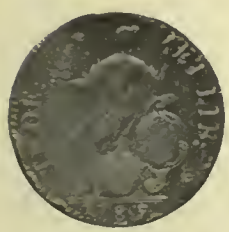
I



6[4]



K[1]



M



7



D



8

CONNECTICUT CENTS, 1785



1



A



2[1]



D[8]

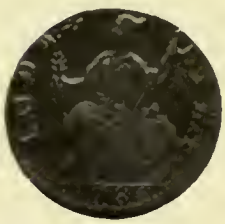


3

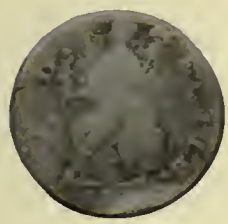


D[1]

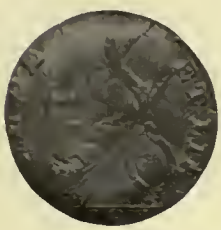




4[1]—G



D[4]



B[2]



5[8]



N





5[4]—O[1]





5[5]—M





5[10]—L





5[11]—R



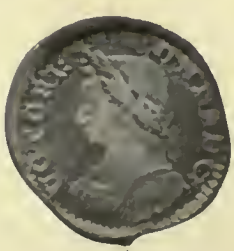
6



K



7



8

CONNECTICUT CENTS, 1786



A —— 1[1] —— VV —— 8



1[2]—C 3—G



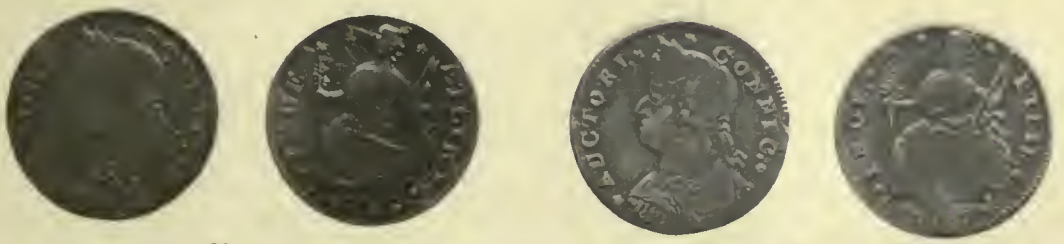
6[1] —— M —— 6[2] —— 9



F —— 15 —— S —— R



21—DD 27—a



28—m 32[6]—X[6]

CONNECTICUT CENTS, 1787



32[8]—aa



33[10]—W[6]



33[18]—Z[24]



33[41]—Z[11]



34—ff



37[10]—RR



38—GG



39—h[1]



40—N



41—ii



46—BB



53—FF

CONNECTICUT CENTS, 1787



1—I



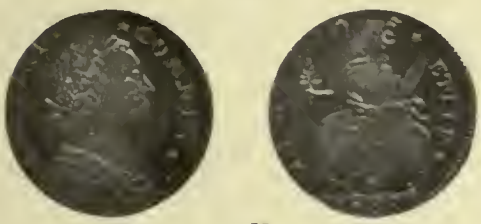
3¹—B¹



4¹—K



5—B²



6—H



9—E



10—C



11—G



12¹—F



15¹—L¹



16⁴—L²



17—Q

CONNECTICUT CENTS, 1788

THE COLONIAL COINS OF VERMONT

BY HILLYER RYDER

Vermont, the first State to authorize a coinage, passed an act June 15, 1785, granting Reuben Harmon Jr., of Rupert, Vt. the right to coin copper. His "Mint" was located at Rupert on a small stream known as Mill Brook. Colonel William Cooley a goldsmith from New York City made some of the dies and assisted in striking the coins. William Buel also assisted in striking the coins having removed his manufactory from New Haven to Rupert, where in connection with Mr. Harmon the business was carried on. It is probable that James F. Atlee also cut some of the dies used here. It is said that the Mint finally ceased to pay expenses for the reason that the "British imported so many of the 'Bung Town' Coppers." It is possible that counterfeit British half pence were also coined here.

The following thirty one varieties of Vermont cents were probably all struck at this Mint.

1. 1785. Mailed bust, laureated, facing right.

VERMON AUCTORI

Rev. Seated figure of Goddess of Liberty facing right, holding with her right hand, flag surmounted with cap. Her left hand extended, holding scales of justice. (R5)

IMMUNE COLUMBIA • 1785

This reverse is from the die first used with two varieties of the NOVA CONSTELLATIO series, then with obverse of counterfeit British halfpenny and the above Vermont obverse.

2. 1785. The sun rising from behind a range of mountains with eight trees. A plough in the field below.

VERMONTS . RES . PUBLICA • 1785 •

One ray of the sun points at the period after RES.

Rev. An eye within a circle from which issue thirteen long rays, alternating with thirteen short ones and a circle of thirteen stars.

STELLA . QUARTA . DECIMA .

One long ray points directly at Q. (R3)

3. 1785. Device and legend similar to No. 2. One ray of the sun points to the right of the period after RES. (R3)

Rev. Device and legend similar to No. 2. One long ray points to left upright of U.

4. 1785. The sun rising from behind a range of mountains with eight trees. A plough in the field below.

VERMONTIS. RES. PUBLICA • 1785 •

Rev. Device and legend similar, but not from same die as Nos. 2 or 3. One ray points at left foot of D. (R^3)

5. 1785. The sun rising from behind a range of mountains that appear to be thickly wooded. The legend encircles the device and date. The sun rises at the left instead of the right as in the other varieties. A line separates the date from the device.

VERMONTIS RES PUBLICA 1785

Rev. Similar to Nos. 2, 3 and 4. Instead of an eye in the centre, this has the face of a sun. The rays are single, pointed and composed of fine lines of unequal length. (R^6)

STELLA QUARTA DECIMA.

A number of specimens exist which apparently are counterfeits of this variety. They lack sharpness of detail and may be casts.

6. 1786. The sun rising from behind a range of mountains with seven trees. A plough in the field below.

VERMONTENSIUM • RES • PUBLICA • 1786 •

The U in PUBLICA is double-cut below.

Rev. Thirteen rays each composed of fine lines of unequal lengths, the points intersecting a circle of thirteen stars.

STELLA • QUARTA • DECIMA •

One ray points to the right edge of Q. (R^3)

7. 1786. The sun rising from behind a range of mountains with nine trees. A plough in the field below.

VERMONTENSIUM • RES • PUBLICA • 1786 •

The U in PUBLICA is double-cut at the left, and the 6 of date close to the plough.

Rev. Device and legend similar to No. 6. One ray points full to the left of Q. (R^2)

8. 1786. The sun rising from behind a range of mountains with nine trees. A plough in the field below

VERMONTENSIUM • RES • PUBLICA • 1786 •

Figure 1 of date double-cut at the right and the top of same is midway between period and left of ploughshare.

Rev. From same die as No. 7. (R^2)

9. 1786. Crosby's 1—C. Mailed and laureated bust facing right.

AUCTORI : VERMON :

Rev. Goddess of Liberty seated facing left, with pole and olive branch. (R^3)

INDE • ✕ ET : LIB : 1796

This variety is familiarly known as the "baby head."

10. 1786. Crosby's 2—A. Mailed and laureated bust facing left.

VERMON : AUCTORI :

Rev. Goddess seated, facing left, with branch and pole. (R^4)

INDE ✣ ETLIB 1786

11. 1786. Crosby's 3—B. Mailed and laureated bust facing left.

VERMON : • AUCTORI

Rev. Liberty seated, facing left with branch and pole (R^4)

INDE : ✖ ETLIB : 1786

The extreme rarity attributed by Mr. Crosby to this variety (R^6) is hardly justified, yet the few specimens found, whose devices and legends can all be plainly seen are extremely rare.

12. 1787. Crosby's 1—A. Mailed and laureated bust facing right.

VERMON AUCTORI

No berries on wreath.

Rev. Liberty seated, facing left, with branch and pole.

INDE ETLIB 1787

13. 1787. Crosby's 1—C. Mailed and laureated bust facing right.

VERNON AUCTORI

Three berries on wreath.

Rev. Britannia seated, facing left with branch and pole. (R)

BRITAN NIA 1787

This reverse die is so badly worn, that the date does not show. Specimens of counterfeit British halfpence may readily be found showing this reverse in fine condition.

14. 1787. Crosby's 2—A. Mailed and laureated bust facing right.

VERMON • AUCTORI •

Rev. From same die as No. 12.

15. 1787. Crosby's 3—B. *Obv.* From same die as No. 11.

Rev. Liberty seated, facing left with branch and pole.

INDE : ✖ E TLIB : 1787

A bad break nearly obliterates the date. (R^6)

16. 1788. Crosby's 1—A. Mailed and laureated bust facing right.

VERMON AUCTORI

A equally distant from head and U.

Rev. Liberty seated, facing left with branch and pole. (R^2)

INDE ET LIB 1788

17. 1788. Crosby's 1—

Crosby gives three dies of his obv. 1 of 1788. Two of these are described in obverses 16 and 18 of this list. No specimen of the third die has been met with.

18. 1788. Crosby's 1—D. Mailed and laureated bust facing right.

VERMON AUCTORI

A much nearer U than to head.

Rev. Liberty seated, facing left with branch and pole. (R^6)

* ET LIB * * INDE 1788

19. 1788. Crosby's 2—A. Mailed and laureated bust facing right.

VERMON • AUCTORI •

N equally distant from period and head. ORI wide. Straight ends to ribbon bow.

Rev. Liberty facing left with branch and pole.

INDE ET LIB 1788

Branch hand points to right of D. Single line above date. (R^3)

20. 1788. Crosby's 2—A. Mailed and laureated bust facing right.

VERMON • AUCTORI •

N close to head and distant from period. Angular ends to ribbon bow. Small wart on bridge of nose.

Rev. From same die as No. 19.

21. 1788. Crosby's 2—A.

Obv. From the same die as No. 20.

Rev. Liberty facing left with branch and pole.

INDE ETLIB 1788

Branch hand points to upright of E. Single line above date. 88 light, touching line.

22. 1788. Crosby's 2—A. *Obv.* From the same die as No. 20.

Rev. Liberty seated facing left with branch and pole.

INDE ET LIB 1788

Branch hand points to right part of D. INDE wide. ET LIB close. Double line above date. 7 low.

23. 1788. Crosby's 2—A. *Obv.* From the same die as No. 20.

Rev. Liberty seated facing left with branch and pole.

INDE ETLIB 1788

Branch hand points to the left part of E. Double line above date. 88 high touching line.

24. 1788. Crosby's 3—A. Mailed and laureated bust facing right.

VERMON × AUCTORI ×

Rev. From same die as No. 16. (R^3)

25. 1788. Crosby's 3—B. *Obv.* From the same die as No. 24.

Rev. Liberty seated, facing left with branch and pole. (R^3)

INDE × ET • LIB × 1788

Branch hand points to upright of D. Single line above date. This reverse is from the same die as Connecticut 1788 No. 1—I.

26. 1788. Crosby's 3—B. *Obv.* From the same die as No. 24.
Rev. Liberty seated, facing left, with branch and pole.

INDE × ET • LIB × 1788

Branch hand points to upright of E. Double line above date, the two lines composing same not being parallel. (R^6)

This variety of B is not listed by Mr. Crosby.

27. 1788. Crosby's 4—C. Mailed and laureated bust, facing right.

VERMON • AUCTORI •

Three berries on wreath.
Rev. Liberty seated, facing left, with branch and pole. (R^2)

INDE • ET LIB • 1788

28. 1788. Crosby's 5—B. Mailed and laureated bust facing right.

VERMON • • AUCTORI

Rev. From the same die as No. 25. (R^6)

29. 1788. Crosby's 6—B. Mailed and laureated bust facing right.

• VERMON • • AUCTORI •

Rev. From the same die as No. 25. (R^5)

30. 1788. Crosby's page 372—A. Bust facing right.

VERMO N • AUCTORI

VERMO close, N distant. Inverted C in AUCTORI.
Rev. From the same die as No. 16. (R^6)

31. 1788. Crosby's page 192—B. Mailed and laureated bust facing right.

GEORGIVS • III • REX •

Rev. From same die as No. 25. (R^3)


1


2


4


7


9

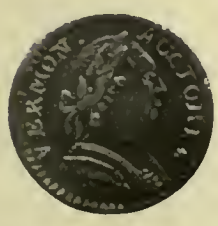

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VERMONT CENTS

THE
COPPER COINS OF MASSACHUSETTS

BY HILLYER RYDER

An act for the establishment of a mint in Massachusetts was passed on Oct. 17, 1786, and on May 2, 1787, Capt. Joshua Wetherle was appointed to it Master Workman. June 27, 1787, the Council designated the devices for the copper coin as follows: — "Advised that the device on the copper coin to be minted in this Commonwealth be the figure of an indian with a bow and arrow and a star on one side, with the word 'Commonwealth,' the reverse a spread eagle with the words 'of Massachusetts, A.D. 1787.'" Most of the dies were made by Joseph Callender of Boston. Some were made by Jacob Perkins of Newburyport. These latter in the opinion of Mr. Crosby were those in which the letter S resembles the figure 8.

The coins of Massachusetts are of one type. Of the cents of 1787, eight obverse and nine reverse dies are found, of the half cents, six obverse and four reverse. Of the cents of 1788 fourteen obverse and fourteen reverse are known, and of the half cents, one obverse and two reverse dies. Forty-one specimens are required to show all the known combinations.

The size of the cent is the same as that of the United States copper cent, and the half cent likewise that of the United States half cent; also the cent and half cent differ in having the word CENT and words HALF CENT in the center of the reverse of each respectively. The cent weighs about 155 grains and the half cent, half as much.

OBVERSE

An Indian standing, facing left, holding in his right hand a bow, and in his left, an arrow, between the top of the bow and his head, is a five pointed star.

Legend: COMMON WEALTH

REVERSE

An eagle displayed, on his breast a shield argent, six pales gules, a chief azure; on the chief, the word CENT; in the right talon is an olive branch, and in the left a bundle of arrows.

Legend: MASSACHUSETTS.

In exergue, the date 1787 or 1788.

CENTS, 1787. OBVERSES

Obv.	Rev.	Rarity	Top of bow	Bottom of bow	Ray of star, points	Butt of arrow under	Point of arrow below tunic, times length of arrow head
1	B	R^6	¾ height of N	Left of foot	At chin	Middle of E	2
2[a]	F	R^5	½ do.	Near foot	At collar	Upright of E	2
2[b]	A, C, E	C	Same die.	Recut, heavy	At collar	Upright of E	2
3	G	R	½ height of N	Near foot	At forehead	Upright of E	2
4	C, D	R^2	½ do.	Left of foot	Below collar	Left part of E	2
5	I	R^6	⅓ do.	Left (?), light	At chin	Left part of E	1½
6	G	R^2	½ do.	Left of foot	Above collar	Upright of E	1
7	H	R^6	¾ do.	Left of foot	At mouth	Upright of E	1

CENTS, 1788. OBVERSES

Obv.	Rev.	Rarity	Top of bow	Bottom of bow	Ray of star, points	Butt of arrow under	Point of arrow below tunic, times length of arrow head
1	D	C	¾ height of N	Near foot	Below collar	Upright of E	2
2	B	R^3	¾ do.	Left of foot	Below chin	Right part of E	2½
3	A, E	R	To top of N	Left of foot	At throat	Left part of E	2½
4	G	R^2	do.	Left of foot	At nose	Right part of E	2
5	H	R^6	½ height of N		Below collar	Left part of E	2
6	N	R	¼ do.	Left of foot	At collar	Upright of E	1½
7	M	R	¾ do.	Left of foot	Above collar	Left part of E	1½
8	C	R^2	To top of N	Left of foot	At mouth	Upright of E	1½
9	M	R^5	½ height of N	Near foot	At collar	Left part of E	1¼
10	L	C	¾ do.	Left of foot	Above collar	Left part of E	1½
11	C, E, F	C	To top of N	Close to foot	At chin	Left part of E	1½
12	H, I, K, M	C	½ height of N	Left of foot	Above collar	Upright of E	1
13	N	R^2	¼ do.	Above, slightly to left of foot	At throat	Left part of E	1½
14	J	R^6	⅛ do.	Touches foot	At throat	Upright of E	2

CENTS, 1787. REVERSES

Rev.	Obv.	Rarity	Upper stroke of dash	Leaves turn	Arrows barbed and not barbed	Barbed pointing below wing	Figures
A	2[b]	C	Light	4 up	10—2	5	Medium
B	1	R[6]	Light	4 straight	6—1	2	Wide. 77 high
C	2[b], 4	R[2]	Light	5 up	8—5	5	Medium
D	4	R[2]	Heavy	2 down, 3 up	8—5	3	Medium
E	2[b]	R[6]	Light	4 up, 1 down	7—3	3	Close. 7 high
F	2[a]	R[5]	Heavy	4 up, 1 down	5—4	0	87 close
G	3, 6	R	Single. Light	5 up	6—4	2	17 close
H	7	R[6]	Single. Medium	2 down, 3 up	8—0	5	Wide. 7 high
I	5	R[6]	Single. Heavy	5 up	7—(?)	2	Large. Heavy

CENTS, 1788. REVERSES

Obv.	Obv.	Rarity	Upper stroke of dash	M and S from top of wing	Number of arrows	Figures	Form of S
A	3	R	Heavy	M $\frac{3}{4}$ below S below	7 close	First 8 low	8
B	2	R[5]	Heavy	M $\frac{7}{8}$ below S $\frac{3}{4}$ below	8 close	Spread	8
C	8, 11	R	Heavy	M $\frac{7}{8}$ below S $\frac{1}{2}$ below	7 close	1 high	8
D	1	C	Heavy	M $\frac{5}{8}$ below S $\frac{1}{2}$ below	7 close	78 low	8
E	3, 11	C	Heavy	M $\frac{3}{4}$ below S above	7 close	78 low	8
F	11	R[5]	Light	M below S above	8 close	1 high	8
G	4	R[2]	Light	M $\frac{3}{4}$ below S $\frac{7}{8}$ above	8 close	88 wide	8
H	5, 12	R	Light	S $\frac{1}{2}$ below	10 medium	Light	S
I	12	R[5]	Light	M below S $\frac{1}{2}$ above	6 medium	7 high	S
J	14	R[6]	Single	M $\frac{5}{8}$ below S above	7 medium	1 distant	S
K	12	R	Light	M $\frac{7}{8}$ below S $\frac{1}{8}$ below	6 medium	1 small	S
L	10	C	Light	M $\frac{3}{4}$ below S $\frac{1}{2}$ below	8 medium	78 wide	S
M	7, 9, 12	C	Light	M $\frac{7}{8}$ below S $\frac{1}{2}$ below	7 spread	1 low	S
N	6, 13	R	Light	M $\frac{5}{8}$ below S $\frac{1}{2}$ below	10 close	17 close	S

NOTES

1787 CENTS. OBVERSES

1. The Indian has an aged face and a prominent chin. AL wide. 1—B (R^6)

2a. The tops of the letters and the lower end of the bow, are very light. 2^a—F (R^5)

2b. From the same die as 2a, the tops of the letters and the bottom of the bow being more heavily recut. 2^b—A, (C). 2^b—C (R^5). 2^b—E (R^6)

3. A defect similar to a period before C and two smaller ones after lower part of II. MM close. 3—G (R)

4. The Indian has a bowed head. A tassel near the top of each boot. No grass near feet. 4—C (R) 4—D (R^2)

5. The Indian is stout and slightly bowed. 5—I (R^6)

6. The Indian is stout; and stands erect as in Obverse 2, 3 and 7. EA wide. 6—G (R^2)

7. The Indian is stout. The die is broken under MMO and again under ALT. 7—H (R^6)

REVERSES

A. The "horned eagle" so called from a break over the eagle's head. Two small twigs on the branch. Sixth arrow from right touches tip of wing. Period under head of lowest arrow. 2^b—A, (C)

B. Upper outside leaf touches tip of wing. Period large and near S. USE close. 1—B (R^6)

C. Lowest leaf has slender, sharp point. Point of lowest arrow pierces period. SS and ET wide. 2^b—C (R^5). 4—C (R)

D. Second outside leaf points to left upright of M. Fourth barbed arrow touches tip of wing. An arrow, not barbed, next to first or lowest one, points directly at period. 4—D (R^2)

E. Point of upper leaf touches second feather in wing. Small twig on left of branch below claw. Period equally distant from S and point of first arrow. Many arrows joined. 2^b—E (R^6)

F. The only variety of cent or half cent in which the eagle grasps the arrows in his right talon and the olive branch in his left, and the only one in which the letters CENT are raised upon the shield instead of being incuse. The second and third leaves from the right of branch almost or quite touch the wing. MA close. 2^a—F (R^5)

G. Third arrow long, piercing tip of wing and terminating slightly to right of same. Period under point of first arrow. 3—G (R), 6—G (R^2)

H. Arrows with small and distinct heads. Fifth arrow points to tip of wing. Period large. Letters poorly spaced. CHU and SE wide. 7—H (R^6)

I. All arrows with heads. Period large. 5—I (R^6)

1788 CENTS. OBVERSES

1. Right side of arrow head, double cut. Center point, resembling a period or button, at middle of lower part of belt. OM closer than ON. 1—D, (C)

2. Arrow head divided lengthwise. Ground does not extend to left of bottom of bow. WE wide. 2—B (R^3)

3. Small die break between N and top of bow. E leans to left. 3—A (R). 3—E (R)

4. Lower end of bow rests on left edge of the sod on which the Indian stands. CO close. 4—G (R^2)

5. See table. Specimen for description, not available. 5—H (R^6)

6. Die break from top of bow, extending up and to right. A smaller break from right of bow, just under right of N. TH close. 6—N (R)

7. Lower end of bow terminates midway between toe and left edge of sod. MON wide. 7—M (R)

8. Lower end of bow terminates at left edge of sod and even with top of toe. Right leg defective at top of boot. OM wide. 8—C (R^2)

9. Bow close to N. EA wide. 9—M (R^5)

10. In fine specimens, a small break may be seen in upper right part of E. Letters evenly spaced. 10—L, (C)

11. Indian slim and tall. Minute die break connects upper right part of E with lower right part of same. MM close. AL wide. 11—C (R). 11—E, (C). 11—F (R^5)

12. Three folds of tunic in front of Indian's left leg and two folds in front of his right. EA wide. 12—H (R). 12—I (R^5). 12—K (R). 12—M, (C)

13. An obverse not listed by Crosby. Bottom of bow terminates in a sharp point not touching the ground. Comparing it with Obv. 6, the other obverse found with N: MON is closer, bow is farther from N and the arrow head farther from leg than in Obv. 6. CO wide. 13—N (R^2)

14. This obverse is not listed by Crosby. The Indian is stout and stands erect. A small tuft of grass to the right and two small tufts to the left of the Indian and three

spears of grass between his feet. Tunic has six folds instead of the usual seven. MM wide. ALT close. 14—J (R⁶)

REVERSES

A. Top of branch touches second feather in wing. Second arrow points to tip of wing. Fifth arrow points to tip of second feather. Sixth arrow has no barb. Seventh arrow points to tip of third feather. 3—A (R)

B. Second arrow points to tip of wing. Fifth arrow points to tip of second feather. Die break midway between wing and bottom of first T. 2—B (R³)

C. Top leaf touches second feather. Bottom of branch terminates in a leaf-shaped loop. Point of second arrow touches wing slightly above tip. Fourth arrow points to second feather. Eagle's leg points directly at period. Letters irregularly spaced. 8—C (R²). 11—C (R)

D. Top leaf almost touches second feather. Lower right leaf touches leg. Third arrow points to tip of wing. S about evenly spaced between T and period. 1—D, (C)

E. Lower left leaf joins eagle's claw. Point of first arrow, midway between tip of wing and period. Point of third arrow touches wing slightly above tip. Fifth arrow points to tip of second feather. MA close. 3—E (R). 11—E, (C)

F. Top leaf almost touches second feather. The two outside leaves are under the two uprights of M respectively. First arrow points to tip of wing. AS close. 11—F (R⁵)

G. Top leaf touches second feather. Point of second arrow touches lowest feather of wing slightly above the tip. Period equally distant from first arrow and S. 4—G (R²)

H. See table. Specimen for description not available. 5—H (R⁶). 12—H (R)

I. Point of first arrow equally distant from S and period. Point of third arrow touches tip of wing. Letters irregularly spaced. First A nearer to S than to M. The figures 88 lean to left. 12—I (R⁵)

J. This reverse is not listed by Crosby. No leaf or arrow touches wing. First arrow points at period. Fourth arrow points at tip of wing. S much nearer to period than to T. The only reverse of the year with a single date line. 14—J (R⁶)

K. Point of first arrow is close to lower right of S. Third arrow points to tip of wing. Fourth arrow almost or quite touches lowest feather of wing. MA wide. ETTS wide. 12—K (R)

L. In addition to the eight arrows listed in the table, there are four others without barbs. The arrow without barb between the third and fourth, is the one that points to the tip of wing. The sixth arrow points to the tip of second feather. MA and SA close. 10—L, (C)

M. The arrows show ten butts, the seventh and ninth being shorter than the others. The point of fourth arrow touches lowest feather, above the tip. Period small, and nearest to point of first arrow, and equally distant from point of second arrow and s.

7—M (R). 9—M (R^5). 12—M, (C)

N. The only variety without a period after s. A minute die break issues from back of eagle's head, level with eye. 6—N (R). 13—N (R^2)

HALF CENTS, 1787. OBVERSES

Obv.	Rev.	Rarity	Arrow head	One ray of star points	Butt of arrow under	Grass
1	D	R^4	Small. Below tunic	At collar	Middle of W	None
2	A	R^3	Large. Below tunic	At eyebrow	Right foot of W	Thin
3	A	R^5	Small. Below tunic	At collar	Between W and E	Thicker at right
4	B, C	C	Small. Below tunic	At mouth	Left part of E	Very thin
5	A	R^2	Large. Half below tunic	Above collar	Right foot of W	Light
6	A, D	R^5	Large. Half below tunic	At throat	Between W and E	High. Light

HALF CENTS, 1787. REVERSES

Rev.	Obv.	Rarity	Dash	Outer leaves turn	Barbed arrows	Below wing	Figures
A	2, 3, 5, 6	R	Double	Up	Five (?) medium	Two	Wide, medium
B	4	R^6	Double	Down	Six, spread	Four	Medium, heavy
C	4	C	Single	Up	Seven, spread	Two	Close, heavy
D	1, 6	R^2	Single	Up	Eight (?), close	Three	Wide, light

HALF CENTS, 1788. OBVERSE

Obv.	Rev.	Rarity	One ray of Star points	Butt of arrow under	Grass
1	A, B	R	At nose	Left part of E	Very light

HALF CENTS, 1788. REVERSES

Rev.	Obv.	Rarity	Outer leaves	Barbed arrows	Pointing below wing	Dash	Figures
A	1	R^6	Nearly straight	Four	One	Sharp ends	88 high
B	1	R	Turn up	Five	One	Blunt ends	Last 8 high

1787 HALF CENTS. OBVERSES

1. Both arms of the Indian are small at the elbows. Arrow is in line with the first stroke of W. Right leg defective at knee, and just above top of boot. 1—D (R^4)

2. Three spears of grass to left of bow, three to right, three between feet and three to right of Indian. Letters well and closely spaced except CO which is slightly wide. Die break inside of right leg. 2—A (R^3)

3. The arrow is about in line with the third stroke of W. The arrow head is small and without point. Body is defective, from under right elbow to belt. ON wide.
3—A (R⁵)

4. The arrow joins tunic and E. Bow is midway between C and Indian. Die break over right foot. 4—B (R⁵). 4—C, (C)

5. The arrow is in line with the third stroke of the W as in Obv. 3, but differs from it by having a large pointed arrow head. Die break inside of left leg at knee.
5—A (R²)

6. The arrow joins tunic and E as in Obv. 4, but differs from it, the bow being nearer to the Indian than to C. Die break from left top of E to border, over right top of W. 6—A (R⁶). 6—D (R⁵)

REVERSES

A. A die break connects stem of branch with eagle's tail. Break, resembling a period, between arrows and eagle's leg. Point of first arrow midway between the tip of eagle's wing and period. 2—A (R³). 3—A (R⁵). 5—A (R²). 6—A (R⁶)

B. The second arrow points to period, nearly touching it. Fourth arrow touches tip of wing. A small die break in front of eagle's beak or possibly a double cutting of it. US and ET wide. 4—B (R⁵)

C. The second leaf touches the lowest feather in wing. The top leaf touches the tip of the third feather. Point of first arrow touches period. Two arrows touch wing. The longest arrow points to the tip of third feather. 4—C, (C)

D. The branch has in addition to the usual four leaves, three small twigs, one to left of and near the top leaf, one to right of and below top leaf and the third to right of the branch, below the leaves and touching the eagle's claw. MA close.
1—D (R⁴). 6—D (R⁵)

1788 HALF CENTS. OBVERSES

1. The arrow head touches the tunic. Letters regularly spaced.
1—A (R⁶). 1—B (R)

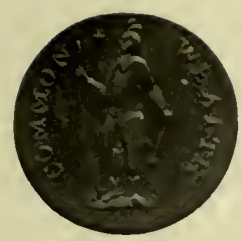
REVERSES

A. Counting all arrows, barbed and otherwise, six are shown above claw. Five butts only show below claw. AC close. 1—A (R⁶)

B. Counting all arrows, barbed and otherwise, seven are shown above claw. Eight butts show below claw. AC wide. 1—B (R)

In all varieties of the half cents of 1787, the branch has four leaves; in both varieties of 1788 it has five.

Plate VII




2a—F




C E




7—H




3—A




9—M




4—B




12—I




6—D




13 —— N




—— 6 | A




14—J




B —— 1

MASSACHUSETTS CENTS AND HALF CENTS

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MYRIANDROS—ALEXANDRIA KAT'ISSON

By EDWARD T. NEWELL

In working out the various coinages which Alexander the Great caused to be issued from the mint situated in the great Cilician metropolis of Tarsos the writer became much interested in the previous coinage struck there by the Persian satrap Mazaios. The result has been a growing conviction that M. Babelon[1] is undoubtedly correct in removing from the coinages generally assigned to the mint at Tarsos those Persic staters of Mazaios which bear a prowling lion as their reverse type. Unfortunately he does not clearly state his reasons for so doing and perhaps, for this very reason, the compilers of the British Museum Catalogue have been content to follow the old theory as the safest and to assign, once more, these lion staters to Tarsos. It seems to the writer that a reworking of the material available, for the purpose of arriving at a definite decision, would not only be interesting but also profitable. It also appears to him that this can be made to lead to far more certain conclusions than even M. Babelon was able to secure.

As a premise to our study let us here state that unquestionably the greater portion of the coins bearing the name of Mazaios were actually struck at Tarsos. The personal history of that great satrap, from about 361 B. C. when he became governor of Cilicia, to about 333 B. C. when he was succeeded here by Arsames, goes far to show that Tarsos must have been the seat of his principal mint. To bring clarity into the question it will be necessary for us to commence our studies with a discussion of Mazaios' issues which are attributable, beyond all question, to the Cilician capital. Of these the initial series is that one bearing the lion and the stag type, "adopted" as Mr. Hill says[2] "at the time of the war (B. C. 350) which had as its object the restoration of Evagoras II to the throne of Salamis." These were followed by the lion and bull type. Now if we carefully collect the known varieties of these staters as published by Six (Num. Chron. 3rd Ser. Vol. IV, 1884), Mr. Hill (Brit. Mus. Cat. *Cicilia*), and M. Babelon (*Traité*, II[2]) we will find

[1] *Les Perses achéménides*, Paris, 1893; also *Traité des Monnaies Grecques*, 2me Partie, vol. II.

[2] Brit. Mus. Cat., *Cilicia*, Introd. p. lxxxii.

them all, both stag and bull varieties, falling into several successive but clearly articulated series, which eventually merge into the Attic tetradrachms and Persic staters struck by Alexander at Tarsos after his occupation of that city in the summer of 333 B. C.[3]

The earliest issues of the Mazaios staters at Tarsos are distinguished by the shallow incuse square of the reverse, as follows:



Fig. 1.



Fig. 2.

SERIES I.

Group A.

בעלתרז on right.

Baaltars enthroned to left, rests l. arm on sceptre and holds ear of wheat and bunch of grapes in r. The whole in linear circle.

מזדי above.

Lion, head in profile, attacking stag to l. The whole in a plain incuse square.

a. Footstool ornamented with facing lion's head.

Beneath stag, ע.

Paris (*Traité*, no. 674, Pl. xci, 14).[4]

b. Beneath throne, Aplustre (?) or ·.[5]

Beneath stag, ע.

B. M., no. 37 Pl. xxx, 1 (ע off flan), from Montague Sale, no. 662; Newell; Boston, **Fig. 1**; Consul Weber Sale, no. 3896, Pl. l.

[3] See the author's *Tarsos under Alexander*, Amer. Jour. of Num., Vol. LII, 1918.

[4] For the specimens preserved in the Paris collection the numbers of M. Babelon's *Traité* are given rather than those in his *Les Perses achéménides*, as several coins appear to have been added to the collection since the appearance in 1893 of the latter work.

[5] The exact nature of this symbol is perhaps still somewhat doubtful. After a careful examination of the well preserved coin in Boston the symbol appears to the writer to be something more in the nature of an aplustre than a letter, as suggested in the British Museum catalogue. Six (Num. Chron. 1884 p. 105, no. 6) describes a coin ostensibly belonging to this group but with the unusual feature of a dotted circle on the obverse. Furthermore, beneath the throne is the letter ·, while on the reverse is △ intead of ע. These three peculiarities, namely the dotted circle on the obverse, the letter instead of a symbol beneath the throne, the greek letter on the reverse, leads the writer to suspect that this particular coin, although he has unfortunately never seen it, is really one of the many barbarian imitations so common to this series. On the other hand it may be a regular issue similar to the piece in the Consul Weber Sale (Pl. L, no. 3896) where the object beneath the throne certainly looks like ·, while the malformed ע on the reverse has very much the shape of a greek delta. The obverse, however, is certainly surrounded by a linear circle, and the coin therefore would present no anomalous features if placed here.

c. Beneath throne, Helmeted Head to r. Beneath stag, 𐤉.

B. M., no. 40, Pl. xxx, 3, **Fig. 2**; Newell.

d. Beneath throne, Ankh. Beneath stag, 𐤉.

Hague; B. M., no. 39; Newell; Boston; Paris (*Traité* no. 676, Pl. cxi, 16); Hoskier Coll. (Hirsch, 1907) no. 430; Carfrae Sale (now J. Ward Coll.). On this coin the Ankh has peculiar form.

e. Beneath throne, Ankh. No letter beneath stag.

B. M., no. 38, Pl. xxx, 2; Paris (*Traité*, no. 677, Pl. cxi, 17).

Group B.



Fig. 3.

Same as for preceding group. Linear circle.



Fig. 4.

Similar, but the lion's head is facing and the whole design is surrounded by a dotted square.

f. Beneath throne, Ankh. Beneath stag, 𐤁.

B. M., no. 43, Pl. xxx, 5, **Fig. 3**; Newell.

g. Beneath throne, Bunch of Grapes. Beneath stag, 𐤁.

B. M., no. 41, Pl. xxx, 4.

h. Beneath throne, Lion's head facing. Beneath stag, 𐤁.

Jameson, no. 1618, **Fig. 4** (ex Prowe Sale, no. 1471); Boston; Hague (Coll. Six); Paris (*Traité*, no. 683, Pl. cxii, 2. This coin definitely shows the symbol beneath the throne, although described in the text as being without a symbol).

i. No symbol beneath throne. In field, 𐤁 reversed. Beneath stag, 𐤁.

B. M., no. 42.

It would be difficult to state definitely which of these two groups appeared first. Group B, with the lion's head depicted as facing and with the incuse square outlined by dots, would seem to be the earlier of the two because in these respects it is closer to the staters of Kition which served as its prototypes. On the other hand the Ankh symbol on the obverse and the Phoenician letter 𐤁 on the reverse are both found on Series II, which makes it possible that Group B fell between the earliest coins of that series and Group A of Series I. However, the point is not really of great importance as both groups belong to the

same general issue, and so I have followed Mr. Hill in placing the dotted incuse square after the plain incuse square.

The divinity on the obverse of these coins is depicted in the guise of Zeus but holding the ear of wheat and the bunch of grapes — the constant emblems of the great Tarsian nature god. He is, however, of a far earlier origin and is to be recognized in the famous Hittite sculpture of Ibreez where he likewise holds the bunch of grapes and the wheat ear. At Tarsos he was evidently assimilated to Zeus by the Greek element in the city's population. As Frazer points out in his *Golden Bough* "if the Baal of Tarsos was a god of fertility, as his attributes clearly imply, his identification with Zeus would be natural, since it was Zeus who, in the belief of the Greeks, sent the fertilizing rain from heaven." The divinity presided over the fruitfulness of the broad and exceedingly rich plain surrounding the city and was naturally the principal and most widely worshipped god of the district. In him the ruling element, of Semitic origin or at least imbued with Semitic civilization and culture, recognized the chief deity of the city and named him accordingly Baal Tars — or *the* Baal of Tarsos.

Beneath the throne on the obverses of our coins may be found various magistratal symbols, following the custom first introduced at Tarsos on the later coin issues of the satrap Datames (see Brit. Mus. Catalogue, Plate xxix, 11-13). The entire obverse design on the coins of Series I is invariably surrounded by a linear circle.

The close resemblance between the lion and stag type on our coins of Series I and the similar design to be found on the contemporaneous coinages of the kings of Kition in Cyprus has long been noticed by numismatists. On the strength of this very striking resemblance they have gone further and assigned the first appearance of these Tarsian coins to the year 351-350 B. C. when Idrieos, satrap of Caria, and Evagoras II, the dethroned king of Salamis, were battling unsuccessfully in Cyprus against the revolted kings of that island. Mazaios however, so far as our historical sources show, had nothing to do with the war in Cyprus; he was charged with the reduction of the revolted Phoenician cities. There is no reason why the campaign in Cyprus should not have been financed from Caria, the home of the commander-in-chief, the actual starting place of the expedition itself, and the seat of a very active mint (Halikarnassos). There is even a series of coins which Babelon (*Traité*, pp. 159 ff.) has assigned to this very occasion as having been struck by either the Carian satrap or by Evagoras to defray expenses, though there is legitimate doubt that these particular

coins were struck at this time only, and not for a considerably longer period. Mazaios' mint at Tarsos, on the other hand, would have had about all it could handle to supply the needed funds for the long and at first disastrous campaign in Phoenicia. M. Babelon indeed assigns to this time (*Traité*, pp. 451-462) the coinages of Mazaios with the lion and bull types, with the inference — though he does not expressly state this — that the earlier coins with the lion and stag types came previous to 351 B. C. In other words they could have had nothing to do with the war in Cyprus. In this case the reason for an adoption of the types prevalent at Kition in Cyprus is not very apparent. Six even makes the conjecture that these silver staters of Mazaios, with the lion and stag type, were intended to circulate alongside of the gold halfstaters of Pumiathon of Kition, of which king, curiously enough, no silver coins are known.

It is just possible that Mazaios' choice of the lion and stag for his first issue of coin may have been governed by the above-mentioned coins of Kition, but it would appear somewhat difficult to find a real reason for such a choice. On the other hand it must not be lost sight of that, on the whole, the types of the Tarsian coinages reflect the religious beliefs prevalent throughout the district of which that city was both the metropolis and the capital. The choice of a possible type for his coins by Mazaios would seem to the writer much more likely to have been determined by some such consideration than by the rather haphazard choice of a type common to the coinage of another city. If the coins of Kition had been peculiarly current throughout Cilicia, this fact might have led to the choice of type. However, as shown by the find described a few years ago by the writer (A Cilician Find, *Num. Chron.* 1914), there were other coins just as commonly current in this district whose types might just as well have been chosen by Mazaios. There must then have been some other determining reason for this particular choice. In fact, it appears to the writer as most probable that the lion and stag type in question — like so many other types found on the coinages of Tarsos — owes its true origin to some popular myth. We know from various classical sources and the researches of modern students that the prevailing cults of Tarsos were very strongly tinged by the Hittite culture of preceding ages.[6] Now one of the outstanding peculiarities of Hittite religious representations is the close association between the god and some animal sacred to him, the deity nearly always being depicted as stand-

[6] Frazer, *The Golden Bough*, p. 185.

ing on the back of the animal. At Tarsos itself we have in the representation on her coins of Sandan a typical example of the influence of Hittite religious and artistic conceptions, first on the popular myths of the district and later appearing among the coin types of the city. In this particular case Sandan, a god of certain Hittite origin, is seen standing on the back of a horned lion. The lion and bull type, becoming eventually the very coat-of-arms of the city, is now known to trace its origin not to a scene common to some wild country infested by lions but to a popular representation of a definite religious conception. Might not the type of the lion and stag be susceptible of a similar explanation? It should be noted that the contemporary half staters of Ariarathes, king of Cappadocia (the home of Hittite culture !), give us a spirited representation of a griffin attacking a stag — clearly a mythological and not a naturalistic design. The clue to the problem may be furnished by a seal-stone now in the author's possession but which was formerly in the collection of Dr. William Hayes Ward and came originally from central Asia Minor. As can be seen by the ac-

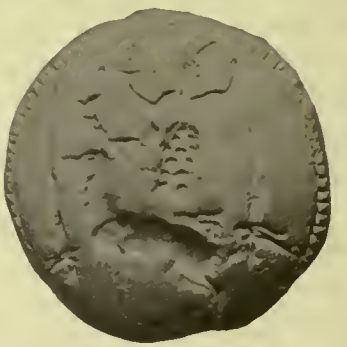


Fig. 5.

companying reproduction of one side of this stone (Fig. 5) we here have a typical Hittite divinity, with his tall, pointed headgear, standing on the back of a magnificent stag. We thus have direct evidence that the stag must have played a definite rôle in Hittite mythology and so may have found its way to Tarsos through the medium of that somewhat mysterious people. That the lion and stag embodied a conception similar to the one presented by the lion and bull is suggested by the fact that these two types appear practically simultaneously in Tarsos. Certainly, if the lion and bull is the artistic expression of certain religious conceptions — as we have every reason to believe — is it not almost presupposed that the same is true of the lion and stag? If the former really typifies some solar aspect of a popular myth,[7] the latter

[7] See J. W. Crowfoot in J. H. S., xx. pp. 118 ff.

almost certainly does likewise and this is apparently proved by the types on a more or less contemporaneous tritemorion of Mazaios. This coin (illustrated on Pl. cxiii, no. 3 of the *Traité*) gives us a facing head of Herakles with the lion's skin covering, and an eagle perched on the head of a stag and between the antlers. Now at Tarsos we have direct evidence[8] that Herakles was but another name for Sandan, and the solar characteristics of both these deities are very pronounced. That Herakles in this case is represented facing would suggest that his solar aspect might have been uppermost in the artist's mind. On the reverse of the coin we have what is practically a short-hand version of the lion and stag type, the eagle taking the place of the lion. This ought not to occasion surprise for, like the lion, the eagle was distinctly associated with solar conceptions and thus might, at times, readily take the place of the larger animal. The small surface at the artist's command in the present case was possibly his reason for thus abbreviating the type used on the stater.

[8] Georgius Syncellus, *Chronographia*, Vol. I, p. 290.

By this long digression the writer does not desire to deny the possibility that the die-cutters at Tarsos turned to the coins of Kition for their artistic inspiration, but he does desire to express his protest against the belief that Mazaios adopted this type solely because the coins bearing it were intended to circulate in Cyprus (which is very doubtful), or to supplement the gold coinage of Pumiathon. Both of these reasons are of such a flimsy texture that Mr. Hill is apparently uncertain (Brit. Mus. Cat. *Cilicia*, Introd. p. lxxxii) which one to follow — a suggestion that it were better not to follow either. Incidentally no adequate explanation has ever been given of the reason for the adoption of this very type at Kition itself. M. Babelon's suggestion that it was symbolic of the successes of the Persians over the Greeks appears to the writer somewhat far fetched.

SERIES II.

Group A.



Fig. 6.

Inscription and type exactly as in Series I except that the whole design is now surrounded by a dotted circle.

j. Beneath the throne, Ankh. Beneath stag, מ.

Paris (*Traité*, no. 678, Pl. cxi, 18); B. M. no. 44, Pl. xxx, 6, **Fig. 6**; Newell; Hague (Coll. Six).

k. Beneath throne, uncertain letter or symbol (Aplustre ?). Beneath stag, מ.

B. M. no. 46; Newell; Bunbury Sale, 1896, no. 397; Benson Sale, 1909, no. 745.

l. Beneath throne, Ram's Head. Beneath stag, מ.

B. M. no. 45, Pl. xxx, 7; C. S. Bement Coll., **Fig. 7**; Paris (*Traité*, 680, Pl. cxi, 20).

m. Beneath throne, Ram's Head. Beneath stag, ש.

Paris (*Traité*, 682 Pl. cxii, 1).



Fig. 7.

Inscription and type as in Series I except that the design is no longer placed in a shallow incuse square but is surrounded by a linear circle.[9]



Fig. 8.

Group B.

Similar to preceding.

Similar to preceding, but lion's head is again facing.

n. Beneath throne, 8 In field, Ankh. Beneath stag, מק.

Newell; B. M. no. 47, Pl. xxx, 8, **Fig. 8**.

[9] The coin described under no. 679 in M. Babelon's *Traité* (Pl. cxi, 19) has already been considered by Six (Num. Chron. 3rd Ser., Vol. IV, p. 107, no. 8) and by Friedländer (*Griech. falsche Münzen*, 1883, p. 43) as a modern forgery. Although I have never handled an actual example of this piece I would concur in this opinion because of the symbol on the obverse (an eagle's instead of a ram's head), the curious cursive form of the inscription, the absence of any letter on the reverse, the peculiar style and fabric, and the uniformly high weights of the half dozen known specimens.

In Series II we may notice that the shallow incuse square of the preceding issue has entirely disappeared, its place being taken by a plain circle surrounding the design. Furthermore, the obverse linear circle of Series I is now replaced by a dotted circle.

As ע, seen on the reverse beneath the stag, appears to have been the chief magistrate for Group A, Series I, so מ appears as the chief magistrate for both Group B, Series I and Group A, Series II.



Fig. 9.

SERIES III.

Group A.

בעלתרז on right. מזדי above.

Baaltars enthroned to l., head facing, rests left hand on sceptre and holds eagle in outstretched r. The whole is surrounded by a dotted circle.

Lion, head facing, attacking bull to l. The whole surrounded by a linear circle.[10]

o. No letters in field. Beneath bull, סם.
Cunningham, Jour. As. Soc. Bengal, 1881, I, p. 175, no. 38.

p. In field, א. Beneath bull, סם.
Munich.

q. In field, ע. Beneath bull, סם.
B. M. no. 57.

r. In field, נ. Beneath bull, סם.
Berlin.

s. In field, ר. Beneath bull, סם.
B. M. no. 58, Pl. xxxi, 2, Fig. 9; Newell.

Group B.

Similar but Baaltars now holds bunch of grapes and ear of wheat as well as the eagle. Border of dots.

Similar to preceding.

t. In field, ר. Beneath bull, סם.
Imhoof-Blumer (now in Berlin ?); Paris (*Traité*, 697, Pl. cxii, 15. Six was mistaken in describing this coin as having dotted letters on reverse).

[10] Those staters which are of an apparently transitional type (the Baal figure in profile with the bull and lion reverse) are really barbarian imitations and not true issues of the Tarsian mint. This is easily seen by their more or less crude style; compare B. M. Cat. *Cilicia*, Pl. xxx, 10, 11; *Traité*, Pl. cxii, 22; Paris Collection, Pl. v, 3 and 12 (these two from the same obverse die).



Fig. 10.



Fig. 11.

Group C.

Similar to preceding. Dotted circle.

Similar but מזרי and סם are composed of dotted lines. Linear circle around.

u. In field, רמ or מר. Beneath bull, סם.

B. M. no. 56; Newell, **Fig. 10**; Paris (*Traité*, 696, Pl. cxii, 13, 14); Hague.

v. In field, תנ or נת. Beneath bull, סם.

B. M. no. 55, Pl. xxxi, 1; Newell; Paris (*Traité*, 698, Pl. cxii, 16, 17); C. S. Bement Coll., **Fig. 11**.

w. In field, הא. Beneath bull, סם.

Berlin; Hague (Coll. Six).

Series III is distinguished from its predecessors by a change in the attitude of Baaltars, by the substitution of the bull for the stag in the reverse type, and by the constant presence of the magistrate letters סם. The same system of circles, however, is carried over from Series II. That is, we find the obverse design surrounded by a dotted circle, the reverse design by a linear circle.

Baaltars is now depicted as holding his bird — the eagle — on his outstretched right hand, at first (Group A) alone, later (Groups B and C) accompanied by the usual bunch of grapes and ear of wheat. The god's face is also turned towards the observer, while a wreath conspicuously crowns his head.

On the reverse a bull replaces the stag of Series I and II, thus reviving an old type of the Tarsian coinage (see Brit. Mus. Catalogue, Pl. xxviii, 12). Although this interesting conception is of common occurrence throughout the East, being found in all ages and among the most diverse peoples, still, as far as the numismatist is concerned, it has come to be most intimately associated with the city of Tarsos and considered as the actual ἐπίσημον of the place itself. The type had however a very deep religious meaning, particularly so, apparently, to the inhabitants of this district, and was therefore adopted as the emblem of their city. It is well known that to the peoples of Asia in ancient times the lion played a large part in their religious conceptions, being endowed by them with a solar significance and considered, in this

aspect, as a beneficent, creative, and masculine power. The bull, on the other hand, as the common associate of the goddess Ateh, became a symbol of the female principle. This conception was often still further developed and the bull considered as typical of the earth, of the ground, and even of dampness and water. This idea would seem to manifest itself in the truly oriental scene of the lion attacking the bull. It indeed possesses a far deeper significance than that of a mere hunting scene. It was the belief that the blood which flowed from the dying bull fertilized the earth, in the words of F. Cumont (*The Mysteries of Mithra*, p. 136) "From the body of the moribund victim sprang all the useful herbs and plants that cover the earth with their verdure. From the spinal cord of the animal sprang the wheat that gives us our bread, and from its blood the sacred drink of the mysteries." It is interesting to note, in this connection, that on certain of the coins of Series IV both the so-called "Key of Life" (the ankh) and the ear of wheat are actually associated with the reverse type of the lion and bull. On the early stater of Tarsos mentioned above, the wheat ear fills the field of the reverse, the lion and bull scene that of the obverse. Thus the juxtaposition on one coin of the allegorical scene and the wheat ear, an object so symbolic of the earth's fruitfulness, would certainly lead one to suppose that the religious conception, as outlined above by F. Cumont, was prevalent in Tarsos at this period. In later times, under the Empire, the lion's place is taken by the great sun god Mithra himself who slays the bull for the good of man. This scene is depicted on the roman imperial coins of Tarsos, a city that formed one of the centres of this particular cult.

In studying the Mazaios coinage it may be noted that, significantly enough, with the introduction of the lion and bull type Baaltars is represented with a *facing* head, and also that now, for the first time, he holds an eagle. That the divinity represented is still Baal of Tarsos is proved both by the accompanying inscription and by the fact that his peculiar emblems, the bunch of grapes and the ear of wheat, are added to the eagle in the immediately succeeding group of staters. In view of the solar significance of the allegorical representation on the reverse of these coins there can be little doubt that the artist was attempting to emphasize also the solar character of Baaltars. The facing head with the full beard and the leaves of the wreath radiating from the crown of the head[11] has much that is reminiscent of other solar representations. The eagle, too, is appropriate as being the constant

[11] M. Babelon (*Traité*, no. 701) even considers the head to be actually radiate at times.

companion of the greek Zeus and therefore by analogy of Ζεὺς Τέρσιος under which name Baaltars was known to the Greeks. To the ancients this bird had also very strong solar associations and would therefore soon become a natural emblem of Baaltars.



Fig. 12.



Fig. 13.

SERIES IV.

Group A.

Similar to preceding. Circle of dots. Similar to preceding. Linear circle.

x. In field, ר. Beneath bull, ץ.

Beneath throne, מ.

Paris (*Traité*, 701, Pl. cxii, 20.)

y. In field, נת. Beneath bull, ץ.

Beneath throne, מ.

Newell, **Fig. 12**; Imhoof-Blumer (now Berlin?); Sandeman Sale, 1911, no. 249 (formerly "Well Known Amateur" sale, 1905, no. 237); Delbeke Coll., 1907, no. 214.

Group B.

z. In field, ר. Beneath bull, Ear of Wheat and ץ.

Beneath throne, מ.

Newell, **Fig. 13**; Imhoof-Blumer (now Berlin ?).

aa. In field, רמ. Beneath bull, Ear of Wheat and ץ.

Beneath throne, מ.

B. M. no. 53, Pl. xxx, 13.



Fig. 14.

Group C.

Similar to preceding. Circle of dots. Similar to preceding except that the design is henceforth surrounded by a circle of dots.

bb. In field, נת. Beneath bull, Ankh.

Paris (*Traité*, 702, Pl. cxii, 21) **Fig. 14.**

Group D.

Similar. Circle of dots.

ee. In field, ב (?) נ.

B. M. no. 54.

Similar. Circle of dots.

Beneath bull, Ram's Head.

Series IV is distinguished from its predecessors by having a symbol placed beneath the bull on the reverse. We now, for the first time, find the letter מ beneath the throne of the obverse. The magistrates ר, רמ, and נת are carried over from Series III, as is also the practice of placing the obverse design in a circle of dots. At first (Groups A and B) the reverse displays the linear circle of Series III, but in Group C this is changed to the dotted circle which henceforth is used for both obverse and reverse.



Fig. 15.



Fig. 16.

SERIES V.

Similar to preceding. Circle of dots.

Similar to preceding but without symbol or letter. A dotted circle again surrounds the design.

dd. In field, ר.

Beneath throne, מ.

Paris (*Traité*, 700, Pl. cxii, 19); Hague; Jameson Coll. no. 1620, **Fig. 15.**

ee. In field, נת.

Beneath throne, מ.

Paris (*Traité*, 699, Pl. cxii, 18); Newell; B. M. no. 51, Pl. xxx, 12 (this is the only specimen known to the writer which apparently has a linear instead of a dotted circle on the obverse).

ff. In field, תנ.

Newell, **Fig. 16**; B. M. no. 52.

gg. No letter in field or beneath throne.

Paris (*Traité*, 694, Pl. cxii, 12).

Series V is distinguished by the absence of either letters or symbols on the reverse but is nevertheless evidently a continuation of Series IV. It carries on the same system of using dotted circles for both obverse and reverse which we noticed was first introduced in Group C of that series,[12] and it displays the initials of the same magistrates

[12] The coin (no. 51) in the B. M. appears to be the "exception that proves the rule."

on its obverses, namely ר and נת. The letter מ is also found beneath the throne on two of its coins.



Fig. 17.



Fig. 18.

SERIES VI.

Group A.

בעלתרז on right.

Baaltars enthroned to l. The throne has a back ending in a swan's (or gooses) head. The god holds an eagle-adorned sceptre in his outstretched right hand and rests his left on his hip. His head is again in profile. Before him an intertwined wheat ear and bunch of grapes.[13] The whole design is surrounded by a dotted circle.

מזרי זי על עברנהרא וחלך above.

Lion, head facing, attacking bull to r. above a double row of turreted and battlemented walls, the whole surrounded by a dotted circle.

hh. Beneath throne, מ.

Paris (*Traité*, 709. Pl. cxiii, 5, 6), **Fig. 17.**

Group B.

Similar, but the throne is without a back, and the wheat ear and bunch of grapes are placed separately in the field. Circle of dots.

Similar. Circle of dots.

ii. In field, נ.

Beneath throne, מ.

B. M. no. 48, Pl. xxx, 9, **Fig. 18**; Newell; Jameson Coll. no. 1619 Pl. L.

jj. In field, א.

Beneath throne, מ.

Yale University Coll.; Paris (*Traité*, 710, Pl. cxiii, 7, 8).

kk. No letters either in the field or beneath the throne.

Hague (Six Collection).

This series again slightly modifies the former types, but by style, fabric, the dotted circle surrounding both obverse and reverse designs,

[13] Six (Num. Chron. 3rd. Ser. Vol. IV, p. 130, no. 12, second coin) is mistaken in describing this type as being without the bunch of grapes. He evidently had before him only the coin illustrated in Babelon's *Traité*, Pl. cxiii, 6, where the bunch of grapes is off the flan. The complete design is given in the companion piece, no. 5, on the same plate.

and the magistrates letters ɔ and ɔ, it is evidently the immediate successor of Series V. Baaltars is once more depicted in profile, while his right hand now holds a sceptre and his left is placed upon his hip. In this scheme he is no longer able to hold his accustomed bunch of grapes and ear of wheat. But so vital are these emblems to the representation of this deity at Tarsos that they have been placed by the artist in the field immediately in front of the god. Thus these symbols, which were evidently of such great local significance, still form a very conspicuous portion of the coin type. As stated above, obverse and reverse designs are again surrounded by dotted circles, while magistrate's initials are to be found both in the field and beneath the throne. The reverse type has been changed in so far as the lion and bull allegory now appears over the walls of Tarsos,[14] accompanied by a long and interesting inscription which proclaims Mazaios as the governor of both Cilicia and Abernahra (Northern Syria).

With these coins the true satrapal issues in Tarsos come to an end. There succeeded the Alexander tetradrachm and a later re-issue of the Persic stater, this latter with types borrowed from the coins of Series VI — all of which has been recently brought out at length in the writer's *Tarsos under Alexander* in the American Journal of Numismatics, Vol. LII. Here it will be sufficient to state that in every detail, such for instance as the throne, the footstool, the robes of the seated god, etc., the Alexander issues are the direct copies of the coins of Series VI, the last of Mazaios' Tarsian coinages.

We have now seen how very complete are the various series' of coin which Mazaios caused to be issued in his name from his seat of government at Tarsos. The coinage, indeed, constitutes a uniform and continuous whole, each series merging easily and clearly into the one following. It is just this perfect continuity, from the time when the coinage was first inaugurated early in Mazaios' rule at Tarsos until it was finally supereeded by Alexander's own issues of Attic tetradrachms and Persic staters, that the writer hopes he has here brought out with sufficient clearness.

There still remains, however, a certain series — for identification's sake called the "Lion Series"—which also bears the name of Mazaios and which most writers have assigned to Tarsos. This series is constituted as follows:

[14] Proved by Mr. Hill (*Historical Greek Coins*, p. 99) as against Six's theory that here are represented the famous Cilician Gates.

THE MINT OF MYRIANDROS

FIRST SERIES.

Group A.



Fig. 19.



Fig. 20.

STATER.

בעלתרז on left.

Deity (or the king of Persia?) enthroned to r. He is clothed in a long robe with wide sleeves, wears a crown, suggestive of an Egyptian origin, holds a lotos-tipped sceptre in his left hand and a flower (lotos bud?) in his right. The throne has a back ending in a swan's head. The entire design is surrounded by a linear circle.

Lion crouching to l. Strung bow above. The entire design is surrounded by a linear circle.

1 Letter in field (?).

Paris (*Traité*, 734, Pl. cxiv, 5).

STATER.

Similar, but the throne has a back ending in a lion's head. Inscription reversed.

Similar.

2 In field, ב.

Jameson Coll. (formerly Warren Coll. no. 1274). **Plate I, 1.**

OBOL.

Lion, head facing, leaping upon recumbent bull to r. The whole is surrounded by a linear circle.

Same deity or king seated to r. as on no. 1. Linear circle.

3 No letters.

Paris (*Traité*, 741, Pl. cxiv, 13), **Fig. 19.**

OBOL.

Youthful male head to l. with curled hair, and crown similar to the one worn by the seated figure.

Same deity or king seated to r. as on no. 1.

4 No letters in field.

Paris (*Traité*, 740, Pl. cxiv, 12), **Fig. 20.**

Group B.

OBOL.

Persian king wearing Kidaris, enthroned to r. and holding sceptre and flower as on preceding coins. The design is surrounded by a circle of dots.

Lion prowling to l.



Fig. 21.

5 No letters in field. Above, ר.
Paris (*Traité*, 742, Pl. cxiv, 14), **Fig. 21.**

SECOND SERIES.

Group A.



Fig. 22.



Fig. 23.

STATER.

בעלתרז on right. Baaltars enthroned to l., his right hand holds the sceptre while his left rests upon his hip. Linear circle around.

6 Thymiaterion surmounted by an eagle in front of Baaltars.
B. M., no. 64, Pl. xxxi, 6, **Fig. 22.**

7 Thymiaterion without eagle.
Paris (*Traité*, 747, Pl. cxiv, 18), **Fig. 23.**

8 Similar. Beneath, Rose.
Newell.

מזרי above. Lion prowling to l. over the sea. Linear circle surrounding the design.

The sea is here indicated by conventional waves.

The sea is here indicated by wavy lines.

Similar.

Group B.



Fig. 24.



Fig. 25.

STATER.

Similar, but a dotted circle replaces the linear.

9 Double ax in front of Baaltars.
B. M., no. 63, Pl. xxxi, 5, **Fig. 24.**

10 In field, Double ax. Beneath throne, מ.
Paris (*Traité*, 749).

Similar. Lion now appears to be walking over rough ground.

11 Round shield behind throne. Similar to preceding.
C. S. Bement Coll. (ex Carfrae Sale, no. 289) **Plate I, 2.**

12 Round shield behind the throne. Lion is on a dotted exergual line. In the exergue, ם.
B. M., no. 62, Pl. xxxi, 4, **Fig. 25.**

13 Linear circle around. Sixteen-pointed star above the lion and a crescent below.
Paris (*Traité*, 743, Pl. cxiv, 15).

14 Dotted circle around. Beneath throne, uncertain object. Sixteen-pointed star above the lion and a crescent below.
Newell, **Plate I**, 3; B. M., no 59, Pl. xxxi, 3.

15 In field, מ. Beneath throne, י. Sixteen-pointed star above the lion and a crescent below.
Paris (*Traité*, 744, Pl. cxiv, 16).

OBOL.

Similar to preceding. Circle of dots. No inscription. Similar to preceding except that the lion is now turned to the r. A sixteen-pointed star above the lion and a crescent below.

16 In field, Shell.
Newell, **Plate I**, 4; Paris (*Traité*, 745, Pl. cxiv, 17).

17 No symbol. מזדי above. Lion to l., no symbols.
Newell.

The two series of coins described above have already been associated by M. Babelon (*Traité*, p. 467 ff.). It is indeed very evident that they are the products of a single mint which used the lion as its emblem. On the obverse is a representation of the Baal of Tarsos, by which name the great nature god of the Cilician Plain was known to the neighboring peoples. In the same manner Tyrian Melkarth was worshipped in foreign lands under the name of the "Baal of Tyre." In the First Series (Plate I, 1) he is seated to the right on a throne which is adorned with a richly carved back. He is magnificently robed, his head is surmounted by a curious and interesting crown, he holds sceptre and lotos-bud. M. Babelon hesitates between naming this figure Baaltars or the king of Persia. The first suggestion appears the more reasonable of the two because of the accompanying inscription בעלתרז which would seem to definitely designate the figure. As M. Babelon believes, these coins were struck outside of Tarsos and there would then be no meaning in that inscription if the figure it accompanies were really the king of Persia. To be sure, the representation of the god in the present case differs widely from the one we have come

to know as Baaltars on the coins issued in Tarsos itself, but may this not, in all probability, be due to a local conception of the god which would not necessarily have to conform in every particular with that prevalent in Tarsos? In other words we have a case very similar to Tyrian Melkarth who is represented on the early coins of his native city as riding on a hippocamp and clothed in oriental fashion, while on the contemporaneous coins of Kition, a Tyrian colony and closely bound to her by ties of blood and commerce, he is represented in Greek guise, striding along in lion's skin and brandishing club and bow. Furthermore it is hardly likely that at this late date the king of Persia, if such he be, would be represented wearing a crown or bonnet of a shape which is particularly close to the purely Egyptian form of crown.[15] The writer, at least, knows of no clear instance, outside of Egypt itself, where he actually does wear such a crown. On the other hand, gems and seals from Syria and the Phoenician coast often give representations of *deities* attired in a more or less Egyptian fashion — a relic of the Egyptian domination of bygone ages. It should be noted, however, that the figure on the obols nos. 4, and 5 does appear to wear a crown very much of the nature of the Persian royal head-dress or "Kidaris." It is probably because of this fact that M. Babelon would see the Persian king in the figure on the staters. But certainly the head on the obverse of the obol no. 4 cannot be the king of Persia with its long curled locks, clean shaven features, and a crown so suggestive of Egyptian form. It is therefore highly improbable that the figure on the staters, with an exactly similar crown, can be anything but what the accompanying inscription declares it to be, namely Baal of Tarsos. The figures, placed in an exactly similar attitude but without the legend, on the obols may all be Baaltars as well, but wearing a crown which is Persian rather than Eyptian in character. Possibly the lack of space at the artist's command may have had something to do with the choice of crowns on the obols.

In the case of the recumbent lion on the reverses of our staters the artist, here too, seems to have been inspired by a Cypriote model. At least the type is very reminiscent of the recumbent rams and goats of the staters of Salamis or the recumbent lions of the Amathusian staters. The latter display an eagle in heavenward flight above the lion, sug-

[15] Although the headdress found on the two staters in question is usually described as a bonnet, in form it has undoubtedly descended from the ordinary Egytian type of royal headgear which is composed of the united crowns of Upper and Lower Egypt. The present crown is a degenerate copy, having in time come to vary in minute details from its Egyptian prototype, its general form and outlines however, unmistakeably proclaim its true origin.

gesting a solar idea underlying the whole design. In the present case we have a bow, the symbol of Apollo, above the lion. Have we here a similar idea or is the bow simply a magistrate's symbol ?

There is no question about the identity of the figure found in the Second Series of the lion staters. He here is figured exactly as on the coins of Series VI of the Tarsos mint. He is now clothed in the Greek fashion and is seated on a diphros. He still grasps the lotos-tipped sceptre, but his left hand rests upon his hip instead of holding the flower. As the Second Series followed closely upon the First Series, each displaying the בעלתרז legend accompanying the god, we have every reason to see in the figure on nos. 1 and 2 not the king of Persia but an oriental concept of the Baal of Tarsos.

The fact that the staters with the prowling lion follow closely upon those with the recumbent lion and belong to one and the same mint is proved by the obols which accompany them. We first have an obol (no. 3) with the seated divinity of the staters on the reverse and a lion attacking a bull on the obverse. This might make us think of Tarsos, where the latter type enjoyed such popularity, were there not such a divergence in details between the two designs. Their die-cutters worked under different artistic traditions. The die-cutter of our obol, like his fellow in Bambyce who produced the coin illustrated on Plate VII, no. 18, of the Paris Catalogue, was apparently influenced from Babylonia, as shown by the details of his bull. For instance, the bull's horns are depicted in profile, are noticeably longer and more curved than on the Tarsian bulls, and jut out forward in a curve above the forehead. This type of bull, as against the Tarsian with its short thick, and straight horns, is found again and again on Babylonian and Persian sculptures.[16]

The next obol (no. 4) has the youthful male head wearing the crown of Egyptian form. There apparently is no doubt that this obol belongs to our series because of the crown and because of the seated figure on the reverse. The third obol (no. 5), clearly a transition piece, presents the same seated divinity on the obverse thus associating the coin with the staters of the First Series, but on its reverse bears a prowling lion. This lion is not in the recumbent position as on the accompanying staters but is stalking majestically along as on the staters of the Second Series. This prowling, lion too, is very reminiscent of Babylonian art

[16] See, for instance, the bulls on the Ishtar Gate of Nebuchadnezzar at Babylon (Koldewey, *The Excavations at Babylon*, Engl. Trans., 1914, Figs. 26, 27, 29, 30), the Bull and Lion on Xerxes' Palace at Persepolis (Maspero, *The Passing of the Empires*, p. 741), and many others.

and should be compared with the noble animal in glazed and colored tile-work discovered by Koldewey at Babylon. Compare it also with

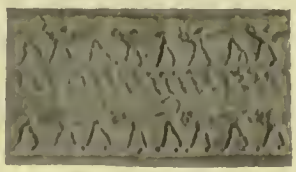


Fig. 26.

the hematite seal cylinder in the author's possession (fig. 26) which came to him from the north Syrian or Mesopotamian district.

This Second Series of the lion staters has long been attributed, probably because of the בעלתרז inscription, to Tarsos. M. Babelon, however, assigns them vaguely to Syria, but without giving any very definite reasons for so doing. That these staters cannot possibly belong to Tarsos would at once be evident were one to attempt fitting them at any point into the carefully worked out sequential arrangement of the true Tarsian issues of Mazaios as described on pages 2-14. In the first place the lion staters commence with a linear circle adorning both obverse and reverse. With no. 9 we find a dotted circle replacing the linear on the obverse, the reverse remaining as before. On the Tarsian coins the dotted obverse circle appears as early as Series II, Group A and continues throughout the remainder of the coinage until long after the coming of Alexander. Neither types nor style will allow us to insert the lion staters ahead of Series II, Group A, nor is it at all likely that the dotted circle, having once been adopted, would be temporarily dropped and then once more employed—as we would be forced to admit if we insisted on inserting the lion staters into the Tarsian series. Neither is it likely that the Greek type of Baaltars having once been adopted (as early as Pharnabazos) would later, even for a very short time, give way to a purely oriental concept of this deity, only to be reinstated soon after. It is likely that the lion staters of the Second Series were issued about the same period as Series VI of Tarsos which they resemble in the details of the Baal figure. But stylistically they would certainly not fit into the Tarsian coinage at this point. From the standpoint of types the lion staters cannot be made to precede Series VI as there would then be a violent break in the even continuity of types from the lion and stag of Series I and II, to the lion and bull of Series III and V inclusive, to the lion and bull over the walls of the city in Series VI and the immediately succeeding reissues under Alexander. The same conclusion can be arrived at by a careful

study of the style, technique, magistrate's initials, symbols, etc. This, however, would only belabor a point which was apparently so self-evident to M. Babelon that he did not even feel it necessary to support his attributions by giving his reasons for departing from the usual assignment of these coins to Tarsos. Finally, and this is perhaps the most striking point of divergence between the lion staters and the true issues of Tarsos, it should be especially noted that on not one of the former do the ear of wheat and the bunch of grapes appear. These symbols have played a conspicuous role in all the various types of Baaltars as depicted on the staters of Tarsos from the time of the Satrap Datames. In only one instance are they wanting, namely on the small group A of Series III where the eagle-bearing Baaltars is first introduced. The wheat ear and the bunch of grapes, however, immediately reappear again on Group B of the same Series and continue thence, without interruption, to the time of Alexander. The ear of wheat appears alone on the first reissue of staters under Alexander, and together with the bunch of grapes occurs once more on his second reissue. Thus from the first issues under Datames to the last ones under Alexander these two symbols, so indicative of the marvellous and far famed fertility of the Tarsian Plain and the special attributes of the chief Cilician divinity, constantly recur. On the other hand *they are never known to occur* on the lion staters, thus making most probable the disassociation of these coins from the Tarsian issues, in spite of the appearance of the legend בעלתרז on all. It is evident that to the die engravers of the lion staters the most important side of Baaltars' nature was not his presidence over fruitful fields and fertile plains, a fact that argues most strongly against the assignment of these coins to Tarsos.

Enough has now been adduced from the evidence afforded by contrasting the lion staters and the true issues of Tarsos to warrant our setting the former aside, and assuming, at least for the sake of argument, that they were struck at some other mint. Hand in hand with the elimination of Tarsos as a possible mint for them, goes also the probability that they were struck in Cilicia at all. This is probable from the fact that the mints of Western Cilicia apparently never struck coins for the satraps. Of those of Eastern Cilicia, both Mallos and Issos had ceased to function by about the middle of the Fourth Century B. C. Only Soloi, producing purely autonomous issues, remained active down to the coming of Alexander. It is highly improbable that it struck money at the same time for Mazaios. In fact, since the days of

Pharnabazos, Tarsos appears to have been the sole Cilician mint which acted for the satrapal coffers.[17]

It is generally admitted that the lion staters of the Second Series are late — that is, they were struck by Mazaios just before the fall of the Achaemenid Empire. For some ten years or more, possibly ever since 350 B. C., Mazaios had been satrap of both Cilicia and Syria, as his Tarsian issues of Series VI take especial pains to mention. Now these particular coins appear to be the contemporaries of the lion staters, as is suggested by the fact that they were the last of Mazaios' issues in Tarsos.[18] Also the Baal figures on the two coinages are more or less identical in both attitude and appearance, and in this regard constitute a sudden innovation in Mazaios' coinages. If then Mazaios, being governor of both Cilicia and Syria, struck at Tarsos for use in the Cilician district a coinage which is easily recognizable as such, is it not immediately apparent that the corresponding and contemporary lion staters might have been struck by him in his other province, namely Syria? Moreover do not the very types of these two issues suggest exactly such an arrangement? Just as the lion attacking a bull over the city walls points directly to Tarsos, whose emblem this was, does not the prowling lion point as distinctly to Syria? As far as coin types prove, the prowling lion is no whit less distinctive of Syria than the lion and bull type is of Tarsos. It never occurs, so far as the writer is aware, among the coin types of Cilicia in ancient times. The nearest approach to it is found on a late bronze coin of the emperor Maximinus struck at Anemurium (B. M. Cat. *Cilicia*, Pl. VII, 6). But here the lion is running, his head turned back to face a star, a type that merely represents the zodical symbol of Sol in Leo. A similar type is also found on rare coin struck by the Roman Emperor Caracalla at Tarsos. When, however, we turn to the coinages of northern Syria we find the prowling lion appearing again and again. It is one of the common types of Bambyce and the later Hierapolis where the lion is sometimes depicted alone or accompanied by the goddess Ateh whose constant associate he appears to have been. The same prowling lion appears on the early coinages of the kings of Commagene, on the coins of Samosata, and on the issues of Palmyra. There is in fact no one type more indicative of northern Syria than the lion. We thus find

[17] Satrapal coins, later than Pharnabazos' period have been assigned to Mallos (Brit. Mus. Cat. Plate XVII, nos. 4-5), but these pieces bear no inscription to prove that they were really satrapal in character.

[18] *Tarsos under Alexander*, Amer. Jour. of Numis., Vol. LII, p. 72.

every reason to accept the lion staters of Mazaios as Syrian in origin. This once admitted, much becomes clear. For instance, it is now easy to explain the real reason for the great vogue enjoyed by the Baaltars and prowling lion type in the last quarter of the Fourth Century B. C. Following the old attribution we might well wonder why these particular types should have been chosen not only by the priestly dynast of Bambyce, but by Mazaios on his later Attic tetradrachms struck in Babylon, and by several other mints in the Mesopotamian and Babylonian districts.[19]

But the Syrian origin once admitted, all this is easily explained by the active commerce which flowed back and forth from northern Syria, across Mesopotamia, to the Tigris, or down the Euphrates to Babylon and the Persian Gulf. For it must have been by this route that the lion staters of Mazaios travelled inland, becoming known to the dynast of Bambyce (who copied them), and to the peoples of Mesopotamia and Babylonia. Mazaios was still striking his lion staters when Alexander and his army invaded the land, and he continued to issue them — but now of Attic weight — when by Alexander's wise choice he finally became satrap of Babylon. The types of Baaltars and the lion may have been revived by Mazaios for purely personal reasons, in continuation of his Syrian mintage, but far more probably because these types had become familiar to the Babylonian people through their close commercial connections with the north.

If our lion staters are really of Syrian origin, then at what mint could they have been struck? Perhaps Bambyce would seem to have been the most important city in all northern Syria at the time of which we are speaking — but is this not largely due to its great significance as a religious centre which has caused its more frequent mention by ancient authors? At any rate it could not have been the mint of the lion staters, because Six (Num. Chron. N. S. Vol. xviii, pp. 103-131) has already established, beyond question of a doubt, the attribution to this city of a fairly numerous series of coins, thus precluding any possibility of its mint having worked for Mazaios. Aleppo, the ancient Chalybon, was no doubt a fairly important centre of population and even of commerce in the Persian period, but in classic sources we hear little of it beyond the fact that its territory was famous for the wine it produced and which it supplied to the royal table. Xenophon does not even mention the place, for in his day the main highroad from the sea to Mesopotamia passed north of it, a clear indication of its minor impor-

[19] See Babelon, *Les Perses achéménides*, Pl. VII, 1-12.

tance. In the Fourth Century B. C., assuredly by far the most important north Syrian city, both from a commercial as from a military standpoint, was Myriandros. Xenophon, confirmed by Scylax (Periplus, p. 40), describes it as being inhabited by Phoenicians, a great emporium, and its harbor filled with merchant ships. In fact it constituted *the* emporium for the vastly important Mesopotamian trade and we may be sure that the astute and intensely commercial Phoenicians would never have settled in such numbers in a commercially insignificant place. Myriandros, at the time we are speaking of, was the largest and most convenient port,[20] with the finest harbor for all the great hinterland of northern Syria. Beyond and above this, however, it marked the terminus of the great and vitally important trade route from Babylon to the sea.[21] The shorter road, via the desert to the Phoenician coast, was infinitely more difficult and hazardous. Indeed this latter, in uncertain times, appears to have ceased to function altogether, so beset was it by robber Bedouin tribes and so lacking in sufficiently dependable wells. The other road to Myriandros from Babylon passed through, for the greater part, fertile and populous regions and that portion over the plains of northern Syria was both easy and much frequented. Altogether, this route has been in constant use from the earliest times. It is possible that after the merchandise from the Persian Gulf or Babylon had arrived at the eastern confines of Syria, portions of it were deflected southwards to the great inland metropolis of Damaskos or to the wharfs of Arados, Byblos, Sidon, and Tyre, while other portions passed northwards by the land route through Commagene and over the Taurus Mountains into Asia Minor. Myriandros, however, still remained the nearest port and through it must have passed all the merchandise destined for the coasts of Asia Minor as far as the Black Sea, for the Greek islands of the Aegaean, and for Greece itself. The city must have been of an importance and size of which the comparative silence of our sources would hardly give a fair idea. This silence is probably largely due to the rise of Antioch after 300 B. C. Throughout Hellenistic, Roman, and Byzantine times that city continued to be the great commercial centre for the eastern trade, thus completely eclipsing Myriandros (now called Alexandria ad Issum). As it is from exactly this period that the majority of our geographical works date, it is but natural

[20] Mövers (Die Phoenikier, II², p. 167) calls it "Die bedeutendste See = und Handelstadt am issischen Meerbusen."

[21] Since this was written, a most interesting article dealing with the same subject and entitled: *The Ancient Piedmont Route of Northern Mesopotamia*, by Ellen Churchill Semple, has appeared in *The Geographical Review* for September, 1919.

that to them the almost forgotten Alexandria ad Issum should be of little importance or interest as compared with gorgeous Antioch. But with the silting up of the mouth of the Orontes river dates the decline of Antioch, and so, throughout the Middle Ages and in modern times the northern port, now called Alexandretta (native, Iskanderun), comes once more into her own, and is again of paramount importance as a seaport for the interior. But to return to the Fourth Century B. C.; the mere fact that Alexander chose Myriandros near which to found a new city to be named after himself is sufficient proof of the great importance of the district to his empire. In fact, as historical geography shows, the Great Macedonian never wasted his magic name on an insignificant locality—there was ever a fundamental reason for his choice, amply vindicated by the later history of his foundations.

Turning to the lion staters themselves, we may note many details which point to Myriandros as their mint. In the first place Myriandros, as we have already taken occasion to point out, was the only Syrian city of any importance at this time which was situated on the Mediterranean. Immediately behind it rose the great mountain over which to this day winds the main road to the famous pass of Beilan, thence descending again to the fertile plains of northern Syria. Now on our coins it is especially to be noted that the lion at times proudly stalks over the waves of the sea (Figs. 22, 23), at other times he prowls over what appears to be a rocky landscape (Plate I, 2). Now Myriandros is the only city in all Syria to which these peculiarities of type would have been of equal appropriateness. They certainly are not appropriate to Tarsos, a city situated in the very centre of a wide alluvial plain and in those days some twelve miles from the sea. The waves, as depicted on our stater no. 6, can only refer to the sea[22] and not perchance to some smoothly flowing river, as is the Cydnus in its course past the Cilician capital, or the Chalus where Aleppo borders its stream. Now if we change our viewpoint slightly so as to conceive of the lion as a purely astral type — as it undoubtedly often was and

[22] There are two doubtful cases known to the writer in greek numismatics where similarly depicted waves might possibly refer to a river or spring instead of to some larger body of water. In each one of these cases, however, there is legitimate doubt. One instance is represented by a stater of Thurium, now in the writer's possession (ex Hirsch Sale, xix, no. 65), where the waves probably represent, not the spring Thuria, but the Ionian Sea into which the waters of the spring — sufficiently typified by the rushing bull — eventually empty. The presence of a *dolphin* swimming among the waves further supports this interpretation. The other instance is on a didrachm of Camarina and here, too, the conventionalized waves may be symbolical not only of the Camarinaean Lake but the Mediterranean as well, near the shores of which the city was situated.

especially so to the Syrians — we recognize in him the sun, either rising over the mountain tops to the east of Myriandros, or about to sink majestically into the waters of the Western Sea. The stater no. 14 (Plate I, 3) proves the eminently astral significance of the lion type by placing above that animal the blazing sun and below, the curved disk of the moon. These emblems cannot by any chance here represent magistrate's symbols, firstly because they are too large and form a too integral portion of the type, and secondly because on the lion staters of Persic weight the purely magistratal symbols are found only on the obverse.

The fact that Myriandros, as against any inland city of Syria, was the mint of these staters is further emphasized by the very evident influence both the style of the Tarsian issues and the types of certain Cypriote coins exerted upon the Syrian artists. The style and general appearance of our coins is so close to those of Tarsos that the majority of writers have been induced to attribute them to that city. On the other hand the form of the solar disk on nos. 12-15 is highly reminiscent of certain gold staters struck by Evagoras II (361-351 B. C.) of Salamis, while others of his coins[23] have for type a prowling lion or a lion devouring its prey. The presence of the sun disk and the eagle on one of these pieces proves the lion type here too must have an astral significance. That the merchants of Cyprus enjoyed close commercial relations not only with the Phoenician coast but also with their semitic relatives in Myriandros, the great port for the Mesopotamian and Babylonian trade, is only natural to suppose. Incidentally we shall soon have occasion to remark that the die-cutters of the Alexandrine tetradrachms struck at Kition copied the contemporaneous tetradrachms struck at Myriandros.

It seems to the writer that the following points have now been gained: first, that the lion staters of Persic weight were issued in one mint; second, that this mint must have been in Syria and not in Cilicia; third, that the mint could only have been located in the busy seaport of Myriandros. Such a conclusion makes also very probable the assign-

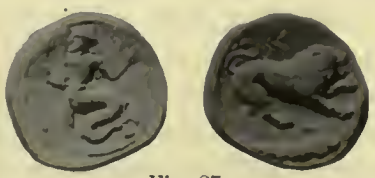


Fig. 27.

ment to Myriandros of a certain unique stater (Fig. 27) whose attribu-

[23] Compare Brit. Mus. Cat. *Cyprus*, Pl. xxiv, 10, 11, 13, 15.

tion has hitherto been a matter of considerable difficulty and dispute. I refer to the interesting stater in the Paris collection which has been variously assigned to Corcyra, Itanos, Ashdod (Six in Num. Chron. N. S. vol. XVIII, 1878), and Ascalon. M. Babelon, both in his catalogue of the Paris collection and in his *Traité*, assigns the coin to either Ascalon or Ashdod. The arguments of Six and M. Babelon rest principally on the assumption that the divinity represented on the obverse is a copy of the famous statue of Dagon at Ascalon described by Xanthus the Lydian and that the letters אז on the reverse are probably the initials of Ashdod (greek, Ἄζωτος). Unfortunately for this theory the old view that Dagon had the form of a fish is now very commonly doubted,[24] and it is impossible to prove that Ashdod (accepted form אשדוד) was ever spelled with a ז instead of a ש. The style of the piece is certainly not Palestinian and has but little in common with the coinages of the Phoenician states. Finally, and this to the writer appears particularly fatal to the Ashdod-Ascalon attribution, the weight of the coin is Persic whereas this system was never employed either at Byblos, Sidon, Tyre, or Gaza. Mr. Hill (Brit. Mus. Cat. Palestine, p. li) has already recognized these objections and says of the coin "The weight and type indicate the neighborhood of Aradus rather than southern Phoenicia . . . ." He also adds in a footnote the various serious objections against assigning this coin to Aradus. I cannot do better than to quote his own words "If the coin is of Aradus, it must belong to the end of the fourth century, since from its style it is impossible to fit it into the ordinary series, which seems to end with the invasion of Alexander. It is, however, also difficult, for many reasons, such as weight, to place it in the period when Aradus was issuing Alexandrine coins." We thus have covered all the fourth century mints in activity along the Phoenician and Palestinian coasts and have found that not one of them can present any valid reasons to claim the stater in question. There only remains, as a possibility, the Syrian coast. Now the moment we associate this coin with the lion staters and, following their attribution, assign it to Myriandros, all our difficulties immediately vanish. The lion prowling over the rocky mountain top — a type peculiarly inappropriate to the plains about Ashdod and Ascalon — is closely duplicated by a similar scene on one (no. 11) of the lion staters. The marine deity with his trident, his wreath, and his fish tail, while reminiscent of a somewhat similar figure found on certain early coins of Aradus, is far more Greek in style and therefore more appropriate to a city situ-

[24] R. Dussaud, *Rev. Arch.*, 1904, iii, pp. 210 f. and *Notes de Mythologie Syrienne*, pp. 77 f.

ated to the north of Arados near the flourishing Greek settlements in Cilicia. The wreath held by the deity would find no parallel in Palestine but is one of the chief attributes of the great Cilician (and Hittite) god (see, on coins, B. M. Cat. *Cilicia*, Plate xv, 3; Plate xxvi, 2; Plate xxix, 1; Plate xxxiv, 2, 6, 9). The Persic weight is perfectly at home in the north-eastern corner of the Mediterranean, so much so that it would have been surprising to have found any other for our coin. Finally, its style is far more similar to that found on fourth century coins of Cilicia than those of Phoenicia and certainly those of Palestine. As the letters ıs will not fit the name of any coastal city from Cilicia to Egypt it is evident that they must represent a magistrate's or some ruler's name, similar to the isolated letters found on the lion staters.

II — UNDER ALEXANDER

Cilicia subdued, and his title to the entire western portion of the Achaemenid Empire definitely confirmed by the great victory of Issos (October 333 B. C.), Alexander proceeded to secure Syria, Phoenicia, and Egypt. Parmenio was sent to seize Damaskos, the great inland metropolis of these regions and the capital of Coele-Syria. Alexander himself advanced southwards and in a year and a half had pacified the lands from the Taurus Mountains to the First Cataract and was ready to advance eastwards against Darius who, in the interim, had collected an army in Mesopotamia to defend the remaining portion of his empire.

In the meanwhile, life had been going on as usual in the newly conquered provinces, thanks to the wise policy adopted by Alexander of interfering as little as possible with the native life and the government institutions established by the Persians. In Cilicia we have learned[25] that he closely followed the Persian precedent in retaining Tarsos as the central and royal mint for this province. He evidently continued to employ the die-cutters and other personnel of the old establishment. To be sure, he necessarily changed the system of weights to conform with the coinage of his empire. For the same reason he substituted his own name and types for those of Mazaios, and he constrained the officials of the mint henceforth to sign their issues in Greek instead of in Aramaic. The style and technique, however, of the new issues remained unchanged. A few years later even a reissue of staters of the old Persic weight and bearing types similar

[25] *Tarsos under Alexander*, Amer. Jour. Num., vol. LII, *passim*.

to former issues was found advisable. In Phoenicia and Cyprus the same thing happened, except that here the local princes still retained their ancient coining rights and therefore were allowed to place upon the new coinage of Alexandrine types certain symbols, monograms, or letters to indicate the issuing authority. Tarsos, however, being a royal mint and operating under royal, not local, authority only placed the initials or symbols of such minor officials as chanced to be in direct charge of the coinage. We know that immediately after the Greek conquest large quantities of the new money were struck in Tarsos, in the principal cities of Cyprus and Phoenicia, in Damaskos, and, later, in Egyptian Alexandria, thus furnishing these provinces with an ample currency. By analogy it is therefore to be expected that the activity of the old Persian mint situated in Myriandros should have been continued under Alexander. Otherwise the populous and commercially important province of northern Syria would, strangely enough, have been left entirely without a mint. There is certainly no apparent reason why the existing mint of Myriandros should have been closed by Alexander when those of Tarsos, Salamis, Kition, Paphos, Arados, Byblos, and Sidon continued in active operation under the new masters. Furthermore, to Alexander as he advanced eastwards, the harbor and city of Myriandros became of particularly vital importance as it commanded the quickest and easiest route to his home base in Macedonia. As we have already stated, the most practicable route from Babylon ran northwards along the Tigris river to Bezabde, thence westwards through Mesopotamia probably via Nisibis and Ossroene (the later Edessa) across the Euphrates to Hierapolis (Bambyce) and thence through northern Syria straight over the Beilan Pass to Myriandros. An alternative route followed the Euphrates, instead of the Tigris, and joined the former again in Syria. The most practicable way of reaching the Mediterranean from Babylon was via one or the other of these two branches. From northern Syria, to be sure, there existed several roads leading to the Royal Highway of the Persian kings, which passed through the heart of Asia Minor westwards to Europe. But the sea route, after the distintegration of the Persian fleets (accomplished in 332-331 B. C.), remained both the quickest and the safest for anything short of an army as the highways through Asia Minor were peculiarly liable to be cut, if only temporarily, by some one of the many wild and turbulent mountain tribes that lived in their immediate neighborhood. Just as we know a strong force was maintained in Cilicia to protect the great highway through the Cilician Gates into

inner Asia Minor, and just as we have found[26] that a very active mint was established at Tarsos both to supply the demands of an active trade and to furnish the pay for the protecting troops, so might we most certainly expect a continuation of the mint at Myriandros to supply the pay for the troops garrisoning this strategically the most vital spot in Syria and to meet the demands both of a busy seaport and of the populous hinterland dependent upon it.

Now it chances that we actually possess a large series of Alexander tetradrachms of the so-called Cilician style which, however, it is impossible to assign to any town in Cilicia. In the first place our study of the Tarsian Alexandrine issues shows clearly enough that they form an entity by themselves into which the present group cannot possibly be inserted. In the second place it is unlikely, and such coins as have come down to us do not suggest, that Alexander allowed the earlier autonomous mints of western Cilicia — such as Kelenderis, Nagidos, Holmi — to continue in operation after his conquest of Cilicia. Finally, the only three remaining mints of Cilicia — Mallos, Soloi, Issos — could not have functioned under Alexander, as is proved by the fact that their municipal issues had all to be struck for them in the government mint of Tarsos. In other words, on the acquisition of Cilicia, the autonomous coinages of that province were suppressed, and the minting of all necessary money, whether for local or for military purposes, was centralized in the enlarged establishment at Tarsos the provincial capital.

We have seen, however, that previous to Alexander's arrival, a series of Persic staters, secondary in character to the large group struck by Mazaios in Tarsos but very similar to it in style and general appearance, was struck by the same satrap at Myriandros. This fact immediately suggests that the following group of Alexander's coins, very similar in style and character to his Tarsian issues, was really struck at Myriandros in immediate succession to the Persic issues of Mazaios emanating from the same important Syrian mint.

[26] *Loc cit.*, p. 70–ff.

ALEXANDRINE ISSUES

SERIES I, circa 333–330 B. C.

TETRADRACHM.

Head of young Herakles to r. in lion's skin head-dress. Circle of dots.

ΑΛΕΞΑΝΔΡΟΥ on r. in a straight line on dies 1, 3, and 4, in curved line on the remainder. Zeus seated to l. on diphros, holds eagle in outstretched r., and rests l. on lotos-tipped sceptre. Footstool beneath feet. The whole in circle of dots.

17 SCORPION in field ; Ϡ beneath throne.

I	*1*	Coll. of R. Storrs, Esq. **Plate I, 5.**
	2	Berlin.
II	*3*	E. T. N.

18 (Müller, no. 1337). SCORPION in field ; ΜΕ beneath throne.

II	*4*	E. T. N. (two specimens).
III	*5*	E. T. N.
IV	*6*	E. T. N.
V	*7*	E. T. N. **Plate I, 6.**
	8	E. T. N.
VI	*9*	E. T. N.
VII	*9*	E. T. N. **Plate I, 7.**
	10	E. T. N.
	11	E. T. N. (two specimens).
	12	Amer. Num. Soc.
	13	E. T. N.
VIII	*13*	Met. Mus. New York.

SERIES II, circa 329 B. C.

TETRADRACHM.

Similar to preceding.

ΒΑΣΙΛΕΩΣ on r., ΑΛΕΞΑΝΔΡΟ (*sic!*) in exergue. Zeus as above except that feet no longer rest on footstool.

19 (Müller, no. 1316). ⋈ in field ; Μ beneath throne.

IX	*14*	E. T. N. **Plate I, 8.**

20 (Müller, no. 1301). ⋈ in field ; ⋀⋁ beneath throne.

IX	*15*	E. T. N. (two specimens)
	16	Toronto ; E. T. N. (two specimens).
	17	E. T. N.
	18	In the trade.
	19	E. T. N. (three specimens). **Plate I, 9.**
	20	Coll. Dattari.
	21	Cambridge (McClean Coll.).

X . . . . *21* E. T. N. (two specimens).
22 E. T. N. **Plate I, 10**
23 E. T. N.

SERIES III, circa 328–326 B. C.

Group A.

TETRADRACHM.

Similar to preceding. ΒΑΣΙΛΕΩΣ ΑΛΕΞΑΝΔΡΟΥ on r. in a continuous curved line. Zeus as on preceding coins, his feet again resting on footstool.

21 (Müller, var. no. 1301). ⋈ in field; ⋀⋁ beneath throne.
X . . . . *24* E. T. N. (two specimens). **Plate I, 11.**
25 E. T. N.

TETRADRACHM.

Similar to preceding, dies showing increased wear. ΑΛΕΞΑΝΔΡΟΥ only, in straight line on right.

DRACHM.

Similar to preceding. Similar to preceding.

HEMIDRACHM (TRIOBOL).

Similar to preceding. Similar to preceding.

22 (Müller, no. 1300). ⋈ in field; ⋀⋁ beneath throne.
IX . . . . *26* E. T. N.
27 E. T. N.
28 E. T. N.; Oxford (Ashmolean, two specimens).
29 E. T. N.
30 E. T. N.; London.
31 E. T. N.
32 E. T. N.
33 E. T. N.
34 E. T. N. **Plate I, 12.**
35 E. T. N.
36 E. T. N.
X . . . . *29* E. T. N.
36 E. T. N.
37 E. T. N. **Plate I, 13.**
38 E. T. N.
39 E. T. N.
40 Hirsch Sale xxxiii, Nov., 1913, no. 657b.
41 E. T. N.

23 (The Drachm). ⋈ in field; ⋀⋁ beneath throne.
E. T. N. **Plate I, 14.**

24 (The Hemidrachm). 𐤊 in field; 𐤌 beneath throne.
Same obverse die { E. T. N.; London. **Plate I, 15.**
Berlin.

Group B.

TETRADRACHM.
Similar to preceding. Similar to no. 21. ΒΑΣΙΛΕΩΣΑΛΕΞΑΝΔΡΟΥ in a continuous curved line on r.

25 𐤁𐤀 in field; 𐤌 beneath throne.
XI . . . . *42* E. T. N.; Amer. Num. Soc.
43 E. T. N.
44 E. T. N.
45 E. T. N. **Plate I, 16.**
46 E. T. N.; another in the trade.
47 E. T. N.: another in the trade.
48 E. T. N.
49 E. T. N.
50 E. T. N.
51 E. T. N.
XII . . . . *42* E. T. N.
48 E. T. N.
52 E. T. N. (formerly, Elder, no. 166).
53 E. T. N. **Plate I, 17.**
54 Oxford (Ashmolean).

TETRADRACHM.
Similar to preceding. Similar to no. 23. ΑΛΕΞΑΝΔΡΟΥ in straight line on r. Feet rest on footstool.

26 (Müller, no. 1302). 𐤁𐤀 in field; 𐤌 beneath throne.
XIII . . . . *55* E. T. N. **Plate I, 18.**
XIV . . . . *56* E. T. N. **Plate I, 19**; Oxford (Ashmolean).
57 E. T. N.
58 E. T. N.
59 E. T. N. (formerly, Elder, no. 295).
60 E. T. N.; Amer. Num. Soc.

SERIES IV, circa 326–323 B. C.

TETRADRACHM.
Similar to preceding but of slightly lower relief. ΑΛΕΞΑΝΔΡΟΥ in straight line on r. Zeus seated to l. as on preceding issues but of slightly modified design and lower relief.

BRONZE.
Similar to preceding. ΑΛΕΞΑΝΔΡΟΥ between club to r. (above), and bow in quiver to l. (below).

27 (Müller, no. 1298). ⋈ and ⊛ in field; ⋀⋀ beneath throne.

XV	*61*	E. T. N.
	62	E. T. N. **Plate II, 1.**
	63	E. T. N. (two specimens).
	64	Elder, no. 216.
	65	E. T. N.
	66	E. T. N.
	67	Belfast (Univ. Coll.).
XVI	*68*	E. T. N.
	69	E. T. N.; Amer. Num. Soc.
	70	Cambridge (Leake Coll.). **Plate II, 2.**
	71	E. T. N.
	72	E. T. N.
	73	Egger Sale, May, 1912, no. 670.
	74	E. T. N.
XVII	*75*	E. T. N.
	76	E. T. N.
	77	E. T. N. **Plate II, 3.**

28 ⋈ and ⊛ in field; ⋀⋀ beneath throne.

XV	*78*	E. T. N.
XVI	*79*	E. T. N. (Oertel Sale, 115). **Plate II, 4.**
	80	E. T. N.
	81	E. T. N.; New York Met. Mus.
	82	E. T. N.; Cambridge (Leake Coll.).

29 ⋈ and ⊛ in field; ⋀⋀ beneath throne.

XVI	*83*	E. T. N.
XVII	*83*	E. T. N. (two specimens).
	84	Amer. Num. Soc.
XVIII	*85*	E. T. N. **Plate II, 5.**
XIX	*86*	E. T. N.
	87	E. T. N. **Plate II, 6.**
	88	E. T. N.



Fig. 28.

30 (Müller, no. 1299). BRONZE. ⊛ in field.
Paris, Fig. 28.

SERIES V, circa 323–320 B. C.

TETRADRACHM.

Similar to preceding and of low relief. ΒΑΣΙΛΕΩΣ ΑΛΕΞΑΝΔΡΟΥ on r. in a continuous curved line. Type similar to no. 26, but the style is similar to nos. 28 to 30.

31 BAI in field; M beneath throne.

XIX	*89*	E. T. N.; another in the trade.
	90	E. T. N. **Plate II, 7.**
XX	*89*	Elder, no. 270.
	90	E. T. N.
	91	E. T. N.
	92	E. T. N. **Plate II, 8.**
	93	E. T. N.
	94	E. T. N.
XXI	*95*	E. T. N.
XXII	*94*	In the trade.
	96	E. T. N. **Plate II, 9.**
	97	E. T. N.; Cambridge (Leake Coll.).
	98	Metr. Museum, New York; another in the trade.
	99	E. T. N.
XXIII	*100*	E. T. N. **Plate II, 10.**

32 BAI in field; M beneath throne.

XXII	*101*	E. T. N.
	102	E. T. N. **Plate II, 11.**

33 M in field; M beneath throne.

XXIII	*103*	E. T. N.
	104	Berlin. **Plate II, 12.**

34 (Müller, no. 1308). M in field; M beneath throne.

XXII	*105*	Munich. **Plate II, 13.**
XXIV	*106*	Berlin. **Plate II, 14.**

SERIES VI, circa 320–319 B. C.

STATER.

Head of Athene in crested Corinthian helmet adorned with serpent. ΒΑΣΙΛΕΩΣ on l., ΦΙΛΙΠΠΟΥ on r. Winged Nike standing facing, holds wreath in outstretched r. and stylis in l.

TETRADRACHM.

Head of young Herakles to r. as before but no longer of "Cilician" style. Border of dots. ΦΙΛΙΠΠΟΥ ΒΑΣΙΛΕΩΣ in continuous line on r. Zeus enthroned to l. as before but now no longer of "Cilician" style.

35 M in field; H beneath throne.

XXV	*107*	E. T. N.; London. **Plate II, 15.**

XXV . . . . *108* Oxford (Ashmolean).

36 beneath throne.

XXV . . . . *109* E. T. N., **Plate II**, 16; Vienna (no. 10736).

110 Hague (no. 29).

111 E. T. N.

37 (Müller, no. 118). STATER. on l., on r.
London. **Plate II**, 17.

38  beneath throne.

XXV . . . . *112* London.

39 beneath throne.

XXV . . . . *113* Vienna (no. 29681), **Plate II**, 18; Dattari Coll.

SERIES I.

This series, which by its style evidently commences the Alexander issues of our mint, is distinguished by the scorpion appearing as a magistrate's symbol in the field. Because of this symbol, Müller attributed these tetradrachms to Commagene (mint, Samosata) in Syria. However, it has recently been shown[27] that Samosata was not in existence as early as the time of Alexander the Great. So far as we know there was no active mint in Commagene in Persian times, and it is not at all likely that Alexander opened one here. The scorpion does not appear on coins struck in Commagene until the reign of Antiochus IV, who flourished 38-72 A. D., from which it is rather too far fetched to argue that the same symbol used some four hundred years earlier must denote a coinage in that district. Furthermore, there is no question but that in the present case the symbol is that of a magistrate and is replaced in the succeeding issue by a monogram which certainly can have nothing to do with Commagene. At Tarsos the system of control had, for the years immediately preceding Alexander's arrival, been a series of letters (א, ב, מ, ר, נת etc.) and the earliest local Alexandrine issues had also borne letters (A, B) as magistratal marks; at Myriandros, on the other hand, the system of control under Mazaios had been principally by symbol (Thymiaterion, Double Ax, Shield, Shell) and the same system was evidently at first carried over on to the succeeding Alexander coins.

Series I of this mint must have been of somewhat larger proportions than the actual coins that have come down to us would seem to

[27] Among others, Babelon, *Les Rois de Syrie, d'Arménie, et de Commagène*, pp. ccviii–ccix.

suggest. The specimens, namely, show eight obverse dies but only thirteen reverse ones, thus giving us too small a proportion between obverse and reverse dies as compared with the remaining issues of our mint. It is certain that as soon as it is again possible to study the public and private collections abroad more reverse, and possibly also obverse, dies will be found.

In details of style, type, and technique our coins are the immediate successors of the Persic lion staters, as can be seen by comparing no. 3 with the following numbers on Plate I.

SERIES II.

This group is distinguished by the introduction of the title *βασιλεύς* and the omission of the *ν* in the word *Αλεξάνδρου*, this being probably due to some local dialectical variation or the confusion so prevalent at this period between pure and impure vowel sounds. It is interesting to note that these coins must have been the ones taken as models by the die cutters of Kition in Cyprus when that mint first commenced to strike coins of the Alexander type (see Numismatic Chronicle for 1915, Pl. XII, 3). The style, the use of the title *βασιλεύς* — so unusual for the Alexander series at this early date, — the arrangement of the inscription, and the curious spelling *Αλεξάνδρο* — all are closely followed on the Kitian coins, suggesting indeed close commercial relations between that city and Myriandros.

Series II is the direct continuation of Series I, as can be seen by comparing the style and technique of nos. 8, 9, and 10 with nos. 6 and 7 on Plate I. For this issue two new obverse dies were cut and at least eleven reverse dies. The sign ⋪ is probably to be construed as a monogram rather than the Phoenician Baal-sign ⅄ placed upon its side. ⋀ (= M ?) is probably the chief magistrate responsible for the coinage, as his monogram appears without exception on all silver coins struck at Myriandros during the next ten years.

SERIES III.

For this series two subordinate magistrates ⋪ and BA (= $\overline{\text{BAN}}$?) functioned, in addition to their superior $\overline{\text{M}}$. The former would each seem to have been at the head of a separate "officina" of the mint, as so far no instance has occurred of an interchange of dies between them. Throughout Series III ⋪ makes use of the old obverse dies IX and X, $\overline{\text{BAN}}$ uses the new obverse dies XI, XII, XIII, and XIV. $\overline{\text{BAN}}$'s tetradrachm issues appear to have been larger than those of his brother

official, but the latter, in compensation, struck divisional pieces, the drachm and the hemidrachm. Judging by the style, only one die cutter was employed in the manufacture of all the obverse dies in the two officinas, but different die cutters produced the reverse dies nos. 26 to 41 and the contemporary nos. 55 to 60. One of the most evident marks of distinction between these two groups consists in the fact that on the former, Zeus is depicted with long locks, on the latter the nape of his neck is free from curls. It is however probable that in Series III the die cutter working for BAN also produced the only two known dies (24 and 25) of ⋈ for this series bearing the *βασιλεύς* title (compare no. 11 with nos. 16 and 17 on Plate I). It is possible to note the increasing signs of wear on the obverse dies IX and X whose span of life and usefulness would seem to have been of considerable length. Plate I no. 8 shows die IX in all its pristine freshness, while no. 12 on the same plate clearly shows its damaged condition after a couple of years of use.

Throughout Series III, the coins of Group A, being the issues supervised by ⋈, are the contemporaries of the coins of Group B, the issues supervised by BAN.

SERIES IV.

Series IV is again the continuation of Series III, but the magistrate BAN is no longer active. The series is distinguished by the presence of a symbol which, because of its small size, is somewhat difficult to describe, but probably is intended to represent a club within a wreath. This symbol has been connected by Müller (p. 279-280) with later coin-types of Tarsos and Elaeusa. In the present case we have certainly to do with the personal symbol of some magistrate, either of ⋈ himself or one of his subordinates. This issue must have been a fairly large one, employing five new obverse dies and at least twenty-eight reverse dies. The flans tend to become larger, the technique grows broader and thinner, the relief lower.

SERIES V.

Here ⋈ disappears completely and finally, while his former fellow magistrate BAN once more occupies the field of the coinage. He reintroduces the title *βασιλεύς*, making it at first difficult to distinguish between his earlier issues (the tetradrachm no. 26) and the present one. A comparison of the two issues soon reveals striking differences. The coins of the second all possess broader flans, their relief is much lower, the drawing thinner and more delicate while the figure of Zeus is far

less well modelled; the style indeed is much more "finicky" and with only a superficial attractiveness. Towards the end of the series the magistrate BAN is replaced by M (= MA?). One old reverse die (XIX) of the preceding issue is continued in use and five new ones are cut, the last one of these (XXIV, reproduced Plate II, 14) abandoning the so-called "Cilician" style for one that is more in accordance with Greek ideals. The reverse die (no. 106) that accompanies XXIV is a transition between the "Cilician" style of its predecessors and the Hellenized style of the later issues of our mint.

SERIES VI.

With Series VI comes the complete abandonment of the "Cilician" style. The issue is also distinguished by the substitution of Philip III's name for that of the now deceased Alexander. We also, for the first time in this mint, find a gold stater accompanying the silver tetradrachms. On the majority of the issues the magistrate MI still places his accustomed monogram, thus helping us to definitely identify these new coins as the successors of our older pieces. So far only one obverse die is known for this entire issue and it is quite possible that it was the only one cut, because clear evidence of the hard use it was put to may be seen in no. 18, Plate II.

In calculating the dates to be assigned to the preceding series of the Alexander coins we possess two more or less fixed points from which to work. The one is represented by October of 333 B. C., a few days previous to the battle of Issos, when Alexander and his army first entered the town of Myriandros, it being obvious that this date represents the earliest possible moment at which that mint could have operated for its new master. The second date is 318 B. C., the probable year[28] in which the great hoard of tetradrachms found at Demanhur, Egypt, was buried. This hoard contained examples of all the tetradrachms described above with the exception of the last two, nos. 38 and 39. Thus the issues of Series I to VI inclusive evidently cover the fourteen odd years lying between the two given dates.

It may be possible to fix the date of appearance of the various series a little more closely. It is to be noticed that at least twenty-five obverse dies were employed in the production of the tetradrachms listed above. Giving ourselves the more than ample allowance of three possible obverse dies not yet come to light, we possess an average of two obverse dies per year. In the author's work on the Alexandrine coin-

[28] The Dated Alexander Coinage of Sidon and Ake, p. 58.

age of Sidon and of Ake are listed 33 tetradrachm dies of the former and 44 tetradrachm dies of the latter city to cover the twenty-seven odd years of their minting activity. The total coinages of the three cities, judging by the specimens that have come down to us, could not have been very far apart in point of size, and therefore the allowance of two obverse dies per year for Myriandros cannot be far wrong. The infinitely more important mint of Tarsos furnishes us with nearly five obverse dies (67 dies to cover 14 years) per year. We thus possess a rough means of calculating the probable dates of the individual issues of the mint at Myriandros. Eight obverse dies are recorded in Series I, but for the first issue, with no previous ones from which to borrow, probably more dies were provided than would otherwise have been the case. At any rate, we may well assign Series I to the years 332, 331, and 330.

Series II may then be assigned to the year 329 B. C., giving us a possible clue to the sudden and unusually early adoption of the title βασιλεύς. In October of 331 had occurred the battle of Arbela which finally decided the fate of the Achaemenid empire. There followed the fall of Babylon, Alexander's advance into Persia, the pursuit and death (July, 330 B. C.) of Darius, the conquest of Baetria and the capture of Bessos (early in 329 B. C.) who had declared himself the successor to Darius and the Persian Empire. With these last two events that great empire officially ceased to exist and Alexander might correctly be considered to have taken the place of the Achaemenid kings, and could rightly claim their titles. It is from this date forward that we find mint after mint of his realms adding the title βασιλεύς to the name of Alexander. Myriandros, Kition, and Arados, among others, adopted the title in and around 329 B. C., Babylon about 325 B. C. or possibly even slightly earlier, Tarsos adopted it about 324 B. C., the Macedonian mints a little later.

Series III, with its two old obverse dies carried over from the preceding issue, and its four new ones perhaps covered the years 328 to 326 B. C. For some unexplained reason the title is again omitted towards the close of this issue. At Kition, Arados, Tarsos, and Babylon the title, once adopted, remains to the end.

Series IV, boasting of five new obverse dies, may have covered the years 326 to 323 B. C.

Series V, with its one old die carried over from the preceding issue, and with its five new obverse dies — no one of which, however, shows any sign of long continued wear — may have lasted from 323 to 320 B. C.

Here *βασιλεύς* once more returns in conformity with the custom generally prevailing at this period throughout the eastern mints.

Series VI could not have been of long duration as only one obverse die is known to us. It may therefore very well have covered the short period 320-319 B. C., the final space of time remaining at our disposal. If we accept the dating here suggested for Series VI we find the substitution of the name of Philip for that of Alexander to have taken place in the very same year as in the mint of Sidon, whose dated series of coins proves this event to have occurred not long previous to October of 320 B. C.

The activities of our mint did not cease with the coins of Series VI but continued for some time longer. But as this article is intended to be a complement to the previous one on the mint at Tarsos,[29] it is better to stop here (with the issues of the year 319 B. C.) thus conforming with that paper. This is all the more logical as at this very period there took place a definite break in the issues of our two mints. From this point forward their several coinages are, if such a thing were possible, even more closely parallel to each other than heretofore, until finally — shortly after the death of Philip III — a single chief magistrate or government official appears to have supervised the issues of the two cities. Thus again, as in the days of the satrap Mazaios, the coinages of Tarsos and of Myriandros become so alike that they have always been confounded. It is the writer's hope, at a future date, to have the opportunity of discussing and contrasting the later issues of the two cities.

[29] American Journal of Numismatics, vol. LII.



Issues of Mazaios, 1-4; Issues of Alexander, Series I, 5-7; Series II, 8-10; Series III, Group A, 11-15; Series III, Group B, 16-19.



Series IV, 1-6; Series V, 7-14; Series VI, 15-18.

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THE GOLD STATERS OF LAMPSAKOS

By AGNES BALDWIN

Attribution of the Electrum Staters of Lampsakos

At the time of the publication of the writer's paper on "The Electrum Coinage of Lampsakos",[1] it was proposed to follow this up with a revised paper on the gold stater coinage, which had formed the subject of an earlier essay by the writer, appearing in the Journal Internationale de Numismatique,[2] 1902. The plates for this new publication of the beautiful gold staters have long been ready, but many causes have operated to delay it. In the meantime, since the issue of the monograph on the electrum staters, their attribution to Lampsakos has been strongly attacked by the late M. Svoronos in his work on the early Paionian coinages of the district which was later called Macedonia.[3] With his accustomed originality and breadth of vision, M. Svoronos has uncovered a whole new chapter in Greek numismatics. Besides re-attributing and assigning to definite mint-places and tribes many of the uncertain silver coins known vaguely as Thrako-Macedonian, he suggests a new home for many gold (electrum) issues previously attributed to Asia Minor. Most of these gold coins are anepigraphic and have always been classed as Uncertain of Asia Minor (*loc. cit.*, pl. xv, 17-27, pl. xvi, 1-27).[4] But now, besides removing from Asia Minor the very primitive electrum coins which bear chiefly geometrical or floral designs as types, M. Svoronos proposes to assign to Macedonia also the well-known electrum staters bearing the familiar types of Lampsakos and Chios, forepart of Pegasus and Sphinx.

There are probably few attributions of uninscribed electrum staters whose place is regarded as more securely established than the Chian and Lampsakene staters. In the writer's monograph on the electrum coins of Lampsakos, the sound basis for the attribution of the latter coins was there

[1] American Numismatic Society Monograph, No. 1, 1914, hereafter referred to as "Electrum Coinage."

[2] Abbreviated to J. I. N.

[3] L'Hellénisme primitif de la Macédoine, J. I. N. 1919.

[4] In addition to the instances of a northern provenance cited by M. Svoronos, the small find of archaic gold coins noted in the Cat. H. P. Borrell, 1852, should be cited. Types of Svoronos, pl. xvi, 1-3, a square in relief, pl. xvi, 10, raised square with crescents, were found in the vicinity of Saloniki. Other archaic gold coins from this find bear the types, rude Gorgon head, head of a horse and head of a fish, Borrell, 39-42.

set forth — the fact that the electrum staters bear the same civic device, the arms of the city, as the later gold staters, also uninscribed, a badge common to other cities of Mysia, and amply confirmed as the *parasēma* of the town by an inscription relating to Lampsakos and headed by a carved figure of the half-Pegasos[1]; the entirely palpable continuity of style of the uninscribed electrum and gold, and the bronze issues inscribed ΛΑΜΥΑ; and, finally, the very valuable evidence for the attribution of the gold and electrum staters — namely, the inscriptions which prove beyond doubt that Lampsakos struck staters in electrum and gold in the Fifth and Fourth Centuries B.C., respectively.[2] These inscriptions prove that Lampsakos had an electrum stater currency c. 450 B.C., and a gold stater currency, c. 350 B.C.; and, when there are at hand coins which exactly fit the requirements, it is difficult to imagine that any writer would have the courage to propose to separate the electrum issues from the gold. M. Svoronos admits the gold and yet will not allow the electrum. He proposes to assign all of the electrum staters, both those of Milesian weight, stater of 14.02 gr. (217 grains) with the palmette symbol (fig. 1), and those of Lampsakene weight, stater of 15.36 gr. (237 grains) with the vine wreath around the type (fig. 2), to Myrkinos in the Pangaian district.



Fig. 1



Fig. 2[3]

On account of the difference in weight standard and the difference in types, both obverse and reverse, it has long been considered doubtful whether the palmette staters belong to the mint of Lampsakos. They were excluded from the regular series in the writer's article on the electrum coinage, as it is difficult to fit them into the series and because they appear to belong rather with a group of electrum staters with varying obverses of uncertain mint but of homogeneous fabric, alloy, weight and incuse type, which Mr. P. Gardner and M. Jameson regard as the coinage of the Ionian Revolt.[4]

[1] Electrum Coinage, p. 12.

[2] Electrum Coinage, p. 10. Inscr. Gr., I, 301-311. The date of the earliest of these Accounts of the Epistatai of Athens has now been fixed as 447 B.C. (Woodward, Jour. Hell. Stud. 1914, p. 277). They contain mention of seventy Lampsakene and twenty-seven Kyzikene "gold", i.e. *electrum*, staters, since χρυσός is naturally used to describe electrum. Pure gold coins were not coined as early as this. The Boiotian inscription of 355-351 B.C. refers to the gold staters. Inscr. Gr., VII, 2418.

[3] This coin is the Pozzi specimen, Cat. Pozzi, pl. lxvii, 2225. It is very close in style to Nos. 9-11 Electrum Coinage, Pl. I, and may be classed as No. 10[a] of Group I.

[4] Jour. Hell. Stud. 1911, p. 151 f., Rev. Num. 1911, p. 60 f., and Electrum Coinage, p. 24 f.

Although the Revolt theory seems to have met with rather wide acceptance, M. Svoronos points out the weak points of the hypothesis, and proceeds to assign all of the staters of this class to different mints of Paionia. It is not incumbent upon the writer to defend the Revolt theory, interesting as it is, and plausible, too, in many respects. That defense may safely be left to the originators of the theory. Our first concern is not with the palmette staters, which are very awkward to explain as products of the Lampsakene mint, but with the heavier staters which have long been regarded as constituting the regular issues of Lampsakos, the *χρυσοῦ στατῆρες Λαμψακηνοί* of the Attic inscriptions.

It would seem that the special reason which led M. Svoronos to assign these staters to Paionia, is his interpretation of certain letters and monograms, which occur on these staters, as the initials of the names of tyrants or rulers. Having already in his first essay on the subject[1] developed his theory of the close political and commercial relations existing between Miletos, the leading city of Ionia, and the Pangaian district in the early Sixth Century B.C., and having thereafter evolved his theory of Ionian influence upon the art of the Paionian coinage through the agency of the tyrant, Histiaios of Miletos, M. Svoronos suddenly discovered the Lampsakene stater with the monogram ⍓.[2] It is only fair to state here that when M. Svoronos was writing his epoch-making work which will undoubtedly revolutionize many of our basic theories on the beginnings of coinage, he had not seen the writer's paper on the electrum coinage of Lampsakos. Otherwise, he might have hesitated to conclude that the monogram ⍓ represented the initial letters of the name of Aristagoras of Miletos who was dynast of Myrkinos, situated at the foot of Mt. Pangaion, during the early part of the Fifth Century; for the occurrence of other letters and another monogram on these same staters, rather nullifies his conjecture that a particular one must represent a tyrant's name. One would be obliged to provide tyrant's names beginning with Θ[3], with Γ[4], and with ⍓ (ΔΕ)[5]; and, also, to provide an historical background to account for their issuing electrum coinage in Paionia, as M. Svoronos has so persuasively and learnedly done in the case of Aristagoras.

[1] Num. de la Péonie, J. I. N. 1913, p. 193.

[2] Electrum Coinage, Pl. I, 5, on the neck of the horse and again in a square of the reverse. M. Svoronos speaks of this stater as unedited (*loc. cit.*, p. 238, No. 3), but the stater was published for the first time by the present writer to whom M. Jameson kindly sent a cast in 1913. This monogram on a stater in the Jameson Collection and other letters and a monogram on staters in the Brussels and London collections, hitherto unpublished, were first made known in the writer's Electrum Coinage.

[3] Electrum Coinage, Pl. I, 2.

[4] *Loc. cit.*, Pl. I, 4.

[5] *Loc. cit.*, Pl. I, 3.

As regards the attribution of the staters of Lampsakos with the letter Ɪ below the horse,[1] to Boges, general of Xerxes, 485-479 B.C., this sounds distinctly like an afterthought — a sort of corollary to the Aristagoras theory. Furthermore, the Ɪ staters are not of the same period as the earlier Lampsakene staters of c. 525-500 B.C., but are to be dated c. 450 B.C.[2] which is too late for the governorship of Boges. Again, that Boges as satrap of Myrkinos for Xerxes should sign his coinage with Ɪ as the initial of the king's name, is very improbable. It is at least unparalleled elsewhere.

M. Svoronos even pushes his theory so far as to deny the suitability of the type, a half-Pegasos enclosed in a vine wreath, to Lampsakos. Pegasos myths and Pegasos and the vine are shown by him to be eminently at home in the Pangaian district. But we have good ancient testimony as to the renown of the Lampsakene vineyards. Strabo,[3] speaking of a neighboring town, says "For their country abounds with vines, as also the country on their confines, namely, the territory of the Pariani and of the Lampsaceni. It was for this reason that Xerxes assigned Lampsacus to Themistocles to supply him with wine"[4]. The coin types of Lampsakos also bear witness to the importance of Dionysiac cults there. Dionysos, bearded or youthful, occurs on the gold staters, and the Maenad head, an uncommon subject on Greek coins, is quite a distinctive feature on the coinage. Just as at Histiaia in Euboia which was called πολυστάφυλος "rich in grapes" by Homer[5], the Maenad head wreathed with the vine is the principal type, so at Lampsakos the frequent occurrence of the Maenad head denotes that the vine was widely cultivated there. Thoukidides I, 138, says of Lampsakos, ἐδόκει γὰρ πολυοινότατον τῶν τότε εἶναι. Again, the cult of Dionysos-Priapos[6], who is represented on the later coinage, on the tetradrachm series beginning c. 190 B.C. and on the Imperial issues, betokens a community whose chief product was the grape. As to Pegasos, this type, whatever determined its choice as *parasēma* of the city,[7] is so evidently Lampsakene (witness the later coinage), that we need not be disturbed by M. Svoronos' urgent arguments in favor of a Paionian habitat for Pegasos. Finally, the silver coinage of Lampsakos was struck on the same weight standard as

[1] Electrum Coinage, Pl. I, 12a-k.

[2] *Loc. cit.*, p. 13 f.

[3] Geogr., Bk. XIII, 12.

[4] So also Plutarch, Them. 29; Thouk. I, 138, and Athenaeus I, 29.

[5] Iliad II, 537.

[6] Athen. 1, 54, Τιμᾶται δὲ παρὰ Λαμψακηνοῖς ὁ Πρίαπος ὁ αὐτὸς ὢν τῷ Διονύσῳ, "Priapos is worshipped by the Lampsakenes, being identical with Dionysos."

[7] According to Gruppe, Griech. Mythologie, I, p. 166, Pegasos, who in Hesiodic myth was begotten of Poseidon and Medusa at the source of Okeanos, is an image of the realm of Poseidon. As a symbol of the sea and commerce, Pegasos is an eminently suitable badge of a great sea-port and commercial center like Lampsakos.

the heavy weight electrum staters as is shown in the section dealing with these issues (see below).

Having now reestablished the traditional attribution of the heavy Pegasi to Lampsakos, let us consider the light-weight Pegasos staters. M. Svoronos suggests that the palmette stater (see above, fig. 1) were struck by Histiaios, tyrant of Miletos, in the town of Myrkinos on the Strymon at the time when this city belonged personally to him, 513-493 B.C.[1] In this case, a Paionian origin is based upon the general claim that gold coinage is bound to have been issued in a country of gold mines, and also upon the argument that the Pegasos myth is strongly localized in the country round Mt. Pangaion.

Now, just at the psychological moment there has come to our knowledge a stater of the palmette class, lacking, however the characteristic ✱ symbol, (fig. 1) as is also the case with the Vienna specimen.[2] This stater, fig. 3, recently acquired by Mr. E. T. Newell who kindly allows its



Fig. 3

publication here, is unique in bearing on the obverse two symbols common to the coinage assigned by M. Svoronos to Paionia. These are the symbols which M. Svoronos calls the Pangaian rose, ✾, below the horse, and a four-pointed star, ✣, to the left of the type.[3]

The style of the obverse of this stater is very close indeed to that of the half-Pegasos of the Vienna stater. In fact the same obverse die, altered later by the addition of the two symbols, may have been used in striking these staters, a point not quite demonstrable to a satisfactory degree on account of the worn condition of the obverse of the new coin. The reverses of both staters are at any rate unquestionably from the same die. As has been noted, they differ from the other Pegasos staters of this group in not bearing the palmette symbol. They are a shade earlier in style, and the smaller, deeper incuse also distinguishes them from the other issues (Elec-

[1] Histiaios' tenure of Myrkinos could not have been for long. Cf. P. N. Ure's remarks in the Origin of Tyranny, p. 61, "Just after the Persian conquest of Thrace and Paionia, Histiaeus of Miletus, one of the Persians king's Greek vassals, almost succeeded in securing from the Great King possession of Myrcinus, a mining centre in the district from which Peisistratus had got so much wealth. He was in fact granted the gift by Darius, who however, was persuaded by the far-sighted Megabazus to recall it."

[2] Electrum Coinage, Pl. II, 1.

[3] J. I. N. 1919, pl. i, 10, 11; pl. ii, 10, 11, 13-15, Derrones; pl. iii, 1, 2, 23, Laiaioi, etc.; pl. xvi, 28 32-34, 39, 43, etc. Pierians of Mt. Pangaion.

trum Coinage, Pl. II, 2-3 f., and p. 30). Now as these two staters evidently belong to the same mint, and as the newly discovered piece bears symbols which M. Svoronos has shown to be distinctively Paionian, there would seem to be no alternative but to attribute them to a mint in the Paionian region—whether to Myrkinos or not, is uncertain with the evidence at present available. The date at which Myrkinos was held by Histiaios, according to M. Svoronos, 513-493 B.C. is appropriate for the style.

These two staters, however, are not the coins which M. Svoronos selected as examples of the coinage of Myrkinos under the tyranny of Histiaios.[1] The coins which he cites (*op. cit.*, p. 237, pl. xvii, 27) are those bearing the palmette (fig. 1). If these half-Pegasos staters which, according to the Revolt theory, are the Lampsakene issues of the Ionian Revolt coinage, are to be transferred to the Paionian region, all of the other electrum staters of the same fabric and weight belonging to the Revolt group, must be given the same origin, and M. Svoronos has found a Paionian mint for each type. This means the total abandonment of the Ionian League theory heretofore so generally accepted.

The discussion of the arguments which M. Svoronos brings to bear in his brilliant attack upon this theory (*op. cit.*, p. 211 f.) is not properly speaking a Lampsakene question, and need not detain us long. There can be no doubt that M. Svoronos has shown up with great skill the weak points of this theory. Whether, however, his new attributions constitute a better solution of the problem than the Revolt theory supplied, seems at present an open question. They are very daring and very ingenious, and after reading the counter-arguments one cannot help feeling one's confidence in the Revolt theory considerably shaken, even though this theory is so well supported by the provenance of certain specimens, namely those which occurred in the Vourla (Klazomenai) hoard.[2]

As we have given two of the Pegasos staters of the light-weight class to Paionia on the ground of symbols alone, it is but natural to investigate the palmette symbol which occurs on the remaining Pegasi. This symbol is rare on Greek coins, although so common in Greek architectural decoration and in vase-painting. A survey of the origin and evolution of this decorative motive in Greek art enables one to recognize as identical a number of variants on the coins which at first glance are quite dissimilar. On Greek pottery of Rhodos, Naukratis, Melos and other wares of the Ionian class, the motive occurs in a developed, fully Hellenized form. In Perrot and

[1] The Vienna stater (Sestini, Stateri Antichi, p. 62, No. 1) was first published in Electrum Coinage, Pl. II, 1, which had not been seen by M. Svoronos when he wrote his Hellénisme primitif, and the stater with the Paionian symbols first became known a few months after the appearance of his great work.

[2] Rev. Num. 1911, p. 60.

Chipiez's History of Art, IX, p. 452, it is stated that the first idea, i.e., the ultimate origin of the design, is to be found in the Assyrian palmette. This decorative design was derived from the conventionalization of the palm-tree, in the familiar tree-of-life designs (see Ward's Seal Cylinders, figs. 668-673). However, from the fact that the palmette appears in such intimate connection with the lotus forms (Perrot et Chipiez, IX, fig. 213, an inverted lotus-palmette combination), on the early Ionian pottery, the more advanced Ionian wares, on Corinthian vases (Perrot et Chipiez, IX, fig. 359, "un lacis de fleurs de lotus et de palmettes"), and then continuously in Greek architecture and vase-painting down to the latest period, one is more inclined, with Goodyear,[1] to seek the origin of the palmette motive in Cyprus where undoubtedly a form of purely local development was evolved under the influence of Egyptian capital-forms which were composed of the lotus, lily and papyrus motives.[2] Even in Mycenean times, Dussaud shows (*op. cit.*, figs. 198, 202) the Egyptian fleur-de-lis with spirals was imitated on local Cypriote products. Early Cypriote coins struck before c. 480 B.C., bear the palmette motive, and the lotus with spirals, which are beyond doubt a survival from early Cypriote art.[3]

The palmette occurs on the following archaic coins: Derronian tribes of Paionia (Svoronos, *op. cit.*, pl. i, 10, 11; pl. ii, 1-4), in the interstices of the large triskeles which forms the reverse type; Derronians (Svoronos, *op. cit.*, pl. i, 12) below the ox-cart on the obverse; Crestonians of Paionia (*ibid.*, pl. xiv, 11, 12), a half-palmette which Svoronos (p. 118) calls *aphlaston ailé*, after Imhoof-Blumer, Monn. gr., p. 105, No. 169, who recognized that this *symbole curieux* occurred also on the octodrachm of the Derronians, obverse, man in cart drawn by two oxen (Svoronos, p. 7, No. 7, "sous les boeufs une longue palme ou aplustre"); Mende, in Macedonia, (Cat. Naville IV, Geneva, 1922, pl. xviii, 438) under the Dionysiac ass of the obverse; Idalium, Cyprus (British Museum Catalogue, pl. v, 38) beneath the body and raised



Fig. 4

[1] Grammar of the Lotus, pl. xi, 1.

[2] Dussaud, Les Civilisations Pre-helléniques, p. 303 f.

[3] Idalium, B.M.C. Cyprus, pl. v, 3-8. Poulsen, Der Orient und die frühgriechische Kunst, p. 29, also assigns the same origin to the formal palmette device of Cypriote art, although he ascribes this art to the Phoenicians.

fore-paw of the Sphinx; and finally, the Pegasos electrum staters under discussion. Later in the Fifth Century are the following instances: Mende, 450-424 B.C., a rare tetradrachm type, recently known through the hoard of coins found at Mende, fig. 4, (Cat. Naville IV, pl. xviii, 442, also, Zeit. f. Num., xxxiv, pl. iii, 26) with a design of four palmettes in a square, on the reverse; Salamis and Paphos, Cyprus, 480-450 B.C., the "enclosed" palmette in a corner of the reverse, British Museum Catalogue, pl. x, 13 and pl. vii, 6-9)[1]; Thasos, 411-350 B.C. (Cat. Naville, vi, Bement Coll., pl. xxx, 860) a drachm with "enclosed" palmette on reverse; Gela, 466-413 B.C. in the exergue of the reverse (British Museum Catalogue, Sicily, p. 69, No. 36, vignette) a palmette in the center, with lateral half-palmettes, which help to explain the half-palmettes of the Crestonian and Derronian coins above cited; Metapontum, 466-413 B.C. (British Museum Catalogue, Italy, p. 249, No. 86, vignette), symbol, in field, of the freer type without the spirals, often called "honeysuckle pattern"; Corinth, 420-338 B.C. (British Museum Catalogue, Corinth, p. 15, pl. iv, 7-9) various designs with spirals.[2]

From the foregoing we may conclude that while the palmette symbol, so rare on coins, is found quite frequently in the Macedonian (Paionian) district at an early date as well as in Cyprus, which may be the locality where the art motive was first evolved, still there is no compelling reason for regarding this symbol on the Pegasos staters (and the stater with the cock, Electrum Coinage, Pl. II, 5, on which it is also found) as evidence of a northern mint. One might be tempted to speculate from its association with the triskeles, a solar symbol, on the Derronian pieces, where in one instance it alternates with the ⊙, a Paionian sign for the sun (Svoronos, *ibid.*, pl. ii, 7) and in another instance occupies the same position on the type as a stellar design, an undeniable sun symbol (*op. cit.*, pl. ii, 5), that the palmette had in this locality, a symbolic solar meaning. This would also be appropriate for the Mende coins on which Dionysiac solar types are found,[3] and also for the horse and cock types of the electrum staters in question, which may also have a solar significance. However this is mere speculation, for apart from these coincidences we have no evidence.

[1] The B. M. C. Cyprus, states that the reverse type of Paphos is derived from that of Ialysos in Rhodes (B. M. C. Caria, pl. xxxv, 1-5) which is similar. But as the types of Ialysos are in no wise original (B. M. C. Caria, p. cl.) it would rather seem the other way about. The type, eagle's head with palmette in corner at Cyrene (Num. Chron. 1891, pl. 1-7), was imitated from the Cypriote coins where we know the palmette in this special form was at home.

[2] Archaic coins of Kyme in Aiolis, B. M. C. Troas, pl. xix, 5-7 exhibit a peculiar floral device in the incuse which may have its origin in the palmette-lotus chain design of Greek pottery.

[3] Compare M. Svoronos' interesting theories regarding the cult by Apollo–Dionysus–Helios in the Pangaian region, *loc. cit.*, p. 127 f. and p. 181 f.

THE GOLD STATERS

Plates I–IV

SEQUENCE OF TYPES

Only three new types of Lampsakene gold staters have become known in the long interval since the publication of the writer's first paper on the subject in 1902. These are, namely, the stater with the head of a youthful Perseus (?), Pl. I, 5, which is in Paris.[1] Another example was seen in the Pozzi Collection some years ago, but this did not appear in the recent sale of Dr. Pozzi's coins. The second bears the figure of a kneeling archer in Oriental costume, Pl. I, 9, was acquired in 1895 by Herr Arthur Löbbecke of Braunschweig, and has since passed with his collection into the Berlin Cabinet. Through the courtesy of the late Dr. Dressel, the writer was permitted some years ago to describe this beautiful and remarkable new type.[2] The third new type is a stater bearing the head of a youthful Dionysos wreathed with ivy leaves and berries (see below, fig. 15), a recent acquisition of M. Jameson, who most generously has allowed it to be published here for the first time. The Perseus head and kneeling archer staters belong to the earliest group of the coinage, while the youthful Dionysos stater is one of the latest issues.

In the former paper on these staters, the coins with figure-types were described before those with head-types, since the series admittedly starts with two figure-types, Herakles strangling the serpents and Helle on the ram, the reverses of which show the winged half-horse *to the left* as on the Fifth Century electrum staters, Pl. I, 1, 2, and because the majority of the figure-types are earlier in style than the head-types.[3]

No attempt was made, however, to arrange the whole series with a uniform reverse type in chronological order. In the case of such a coinage lasting less than a century (c. 390-330 B.C. or as some writers have thought, 394-350 B.C.)[4], it seemed hardly possible to discover differences of style sufficiently marked to enable one to determine the order of the issues. But in casting about for a more satisfactory arrangement, an intensive study of the details of the reverses, and of the sizes of flans and types, coupled with the study of the style of the obverses, has furnished the clue to the order of the issues. It is rather remarkable that there is only a single case

[1] First published by Babelon, Traité II², No. 2547, pl. clxxi, 14.

[2] An Unedited Gold Stater of Lampsakos, Zeit. f. Num. xxxii, p. 1 f, pl. i, 1.

[3] The scheme of classification of the Lampsakene gold staters was published in 1915 in the article cited in Note 2. This article contains also the writer's view of the dates to be assigned to the gold stater series. Much of the argument that follows as to the chronological succession of the issues, and the date of the staters is matter repeated from that article, though not in the same form.

[4] Head, Hist. Num.², p. 529. Wroth, B. M. C. Mysia, p. xx f.

where two different obverse types have been found to share a common reverse die. This case is the reverse die of the Paris stater of the Herakles and serpent type and the two staters bearing the Helle on the ram type, Pl. I, 2, 3, and 4. But it seems reasonable to hope that as new specimens of Lampsakene staters appear, more die connections will be found which will then serve as a sure guide to the order of the issues. The chronological scheme here outlined, while perhaps not infallible since it is based chiefly on the data afforded by the details of the reverses, is convincing enough when one follows step by step the evolution of the style of the Pegasos. Besides the evidence furnished by the style of the coins, size of their flans, and size of their types, there is also that presented by the two principal finds of Lampsakene staters the Asia Minor and Avola hoards; and the analysis of these finds entirely bears out the conclusions reached by the study of style.

The earliest issues which include both figure-types and head-types are those coins which have in general smaller size flans and types. Without intending to draw a hard and fast line between the groups, it may be said that the coins on Pl. I, Nos. 1-21, all fall within the earliest group. The second group of coins is characterized by a much more advanced type of Pegasos — the horse's head is better proportioned, a "ladder" design now appears on the right wing and also on the left wing, or what represents the left wing in an abbreviated scheme. The coins of this second group are in general of a medium size of flans and types as compared with the third and last group. They may be said to extend down to Pl. II, 27. It is difficult to say just where we consider the middle style to end for it merges so easily into the third style. However, the first coin of the middle group, the earliest of the Hermes head types (Pl. I, 22) is a connecting link between the earliest and the middle styles, for the "ladder" pattern is not yet worked out on the wings of the Pegasos of this coin. The second Hermes type shows the cross-hatching on the feathered portions of the wings which is usually found on all the succeeding coins and is only omitted when the style begins to degenerate, as it does most markedly at the end of the third group. This type, therefore, is a satisfactory starting point for the middle group.

The middle group shows a Pegasos whose head is in better proportion to the body than on coins of the earliest group. The style of the obverses is delicate and compact as on the coins of the first group. When we reach the third group, whose beginning is somewhat hard to define exactly but which may be said to start with Type 28 of Pl. II, we meet with a style which for breadth and nobility cannot be surpassed. The Zeus, Nike, Aktaion and Hekate types are of an incomparable dignity and beauty. The reverses

now reach the highest development which is to be seen in the splendid horses of the Zeus and Nike issues. From this type forward, the art of the reverses begins to decline. The carefully evolved, schematized treatment of the wings, with fine cross-hatching and "ladder" pattern, soon suffers at the hands of less conscientious artisans than those who were working to perfect the type. Carelessness in the striking appears also on the reverses (Pl. III, 12, 14, 16-18), while the obverse designs are still at the very acme of fine art. On the types following the Zeus Ammon (Pl. III, 23), there is a more marked decline in the reverse style — the last issue (Pl. III, 30-35), revealing a quite inferior Pegasos to that of the first coins of the whole series of staters, which though awkward are never negligent in style. The obverse types, Dionysos, Pl. III, 21 and Persephone (?), Pl. III, 30, are of a noticeably rough style.

In spite of the lack of die connections for the reverses of different obverse types, there can be no uncertainty about the order of the types on general lines, for there does exist such close similarity between the reverse dies of certain different obverses as to couple these issues as infallibly as identical dies would. For example, the Apollo head of Pl. I, 27, has a reverse die which resembles that of Pl. I, 26, so closely that it is hard at first sight to distinguish the two dies. The same may be said of the reverses of Pl. I, 9 and 10, in which the treatment of the details is in all respects alike. The reverse of Pl. I, 15, is like these two in the still rather large head and the treatment of the wings of the Pegasos, but it shows an advance over all of the preceding reverses in the treatment of the far wing of the horse, which now begins to appear as though separate from the body. The inner curve on the far wing which gives this effect of separation is seen from now on almost without exception. The reverses of Pl. I, 16 and 17, are too much alike to admit of any hesitation as to their being consecutive or closely consecutive issues. The reverses of the Herakles and Demeter types, Pl. I, 29 and 30, are almost but not quite identical, and are different from all other reverses in the rendering of the fore-legs. Then again there is a very noticeable similarity in style on the obverses of the coins which we have grouped together. The Maenad head of the early group, that specimen which is the most advanced in style, Pl. I, 20, has a close affinity of style with the Hermes and Apollo heads, Pl. I, 26 and 27. The Hera, Zeus and Nike heads, Pl. II, 30 and 31, and Pl. III, 10, the Aktaion and Hekate heads, Pl. III, 18 and 19, might be by the same artists.

Here and there one finds deviations from the usual reverse style. The Pegasos wing is treated quite independently in the second Dionysos-head type, Pl. II, 18, 19; it follows no tradition, and the Pegasos itself is unusually

large. The head of Dionysos, however, is small, and the type agrees very well in style with the satrapal head of the coins preceding it on the plate. This is a case where we might suppose that missing links would supply a set of dies that would couple up and give a more consecutive development. Yet reverses of individual style are found now and again throughout the whole series. An example is Pl. II, 28, where the horse's head is larger than usual in proportion — the wings also. Another instance is the coin with the "archaic" Athena head, Pl. III, 29; its reverse has no parallel on the coinage. The head which is directly copied from the coinage of Athens, in profile *to left*, however, is quite akin to the issues of 338-329 B.C. This would fall at the very close of the Lampsakene issues according to our dating, and the reverse may consequently be accounted for in the same way as those here classed as the latest issue, Pl. III, 30, showing a complete breaking away from the traditional scheme of the wings, of which signs are already manifested in some of the preceding types.

After the Nike type of Pl. III, 2, the Pegasos is never treated in the fine and carefully perfected style characteristic of the whole of the middle and of the first examples of the third group. There is just one coin, Pan-head, Pl. I, 21, which by reason of its small flan and the smaller size of its obverse and reverse types, may perhaps belong somewhat earlier than it has been placed. It might precede the facing Satyr head, Pl. I, 2, though it could hardly come earlier. Note the way in which on the earliest types, the feathered end of the near wing curls over toward the horse's head.

The following reverses selected from the three groups into which the staters fall, are representative of the evolution in style which gives the key to the chronological order of the issues. This evolution is exactly parallel to the stylistic development of the wing of the Sphinx in the transitional and later Fifth Century coins of Chios.



Fig. 5

Fig. 5, Helle on the ram (Pl. I, 3), exhibits a Pegasos of semi-archaic style. The reverse die is identical with that of the Herakles and serpents type (Pl. I, 2), and these are the earliest reverse dies, as the direction of the horse *to the left* and the kinship with the electrum staters indicate (type with Ξ, Electrum Coinage, Pl. I, 12a f.). By this we mean that the more naturalistic feathered form of the wing found on the archaic electrum staters is still retained.



Fig. 6



Fig. 7

Figs. 6 and 7, kneeling archer and Nike sacrificing a ram (Pl. I, 9 and 10), of strikingly similar style, exhibit some advance over the earlier types, but the wing behind the horse is not yet separated from the truncation of the body, and the feathered portions of the wings are still more or less naturalistic, as on the archaic electrum coins. The reverse type is now turned *to the right*, and this direction remains unchanged in all the succeeding gold issues, as well as on all other silver and bronze issues struck hereafter.



Fig. 8



Fig. 9

Fig. 8, Maenad head (Pl. I, 19) shows the beginning of the separation of the far wing from the body of the horse and the feathered parts of the wings conventionally schematized.

Fig. 9, Hermes' head (Pl. I, 25) marks the complete development of the schematic treatment of the wings, a sort of "ladder" pattern running down the middle of the right wing and finishing off the inside of the left wing, and fine cross-hatching appearing on the feathered portions of both wings.



Fig. 10



Fig. 11

Fig. 10, Zeus head (Pl. II, 22) shows the same details of treatment and a larger size of type and flan.

Fig. 11, Zeus with sceptre (Pl. III, 2) of still larger size of type and flan, exhibits the highest development of style in a finely proportioned vigorous Pegasos, of which several different dies exist.

The wing of the Sphinx on the coins of Chios shows a similar evolution from the archaic style, which also prevails through the transitional period, although this "modernization" is effected suddenly (in the tetradrachms of c. 440-420 B.C.) and not by degrees as in the Lampsakene coins.


Fig. 12


Fig. 13


Fig. 14

Fig. 12, Aktaion head (Pl. III, 14), Fig. 13, Kabeiros head (Pl. III, 26), and Fig. 14, Aphrodite (?) head (Pl. III, 33), illustrate the gradual decline in style which is most evident in the carelessly done reverse of the Kabeiros head — a beautiful type, and the sadly inferior style of the Aphrodite (?) staters.

Enough has been said in justification of our arrangement of the staters from the standpoint of style. It was mentioned earlier that the evidence of two hoards containing Lampsakene staters confirmed our arrangement. Sometime ago, Six[1], taking the style of the reverses as a guide, had arranged the twenty types known to him in a chronological order which in many points corresponds with our own. Mr. Hill, of the British Museum, was once kind enough to give the writer a letter written to the late Mr. Wroth by Six, dated Amsterdam, May 18, 1892, in which the distinguished numismatist, to whom our science is indebted for so many of its most original and learned contributions,[2] outlined his idea of the grouping of the Lampsakene staters into two groups, according to the two finds. Löbbecke[3] also, and Greenwell,[4] in publishing these finds which were made about 1888 at Avola, near Syracuse, and in Asia Minor, probably in the Troad, made very just observations upon the differences of style shown by the coins in the finds. Of the latter hoard, Löbbecke wrote that all of the staters appeared to be later than those of the Avola hoard, the flan of the former being larger and flatter, and the incuse square almost disappearing — the workmanship in certain staters showing already that a decline in style had set in. Greenwell wrote of the facing Satyr head which came from the Avola find, "This fine stater of Lampsacus, of an earlier issue than some of those presently to be noticed,[5] formed part of a hoard lately found in Sicily." And, again, in discussing the Asia Minor find, he wrote, "Two of them appear to belong to the later issue of gold staters of Lampsacus, and probably do not date from a time earlier than that of Philip II of Macedon."

[1] Num. Chron. 1888, p. 111.

[2] It was Six who first called attention to the Boiotian inscription of the middle of the Fourth Century B.C., which mentions gold staters of Lampsakos (Electrum Coinage, p. 10), as this letter proves.

[3] Zeit. f. Num. 1890, p. 179.

[4] Num. Chron. 1890, p. 25.

[5] Namely, those from the Asia Minor hoard.

The Avola find[1] contained seven different types as follows[2]: a figure-type, Apollo seated (Pl. I, 6), and the head-types, Satyr facing (Pl. II, 2), Demeter r. (Pl. I, 15), Hermes l. (Pl. I, 22), Herakles l. (Pl. I, 29), Athena l. (Pl. II, 8) and Maenad l. with *sakkos* (Pl. II, 12). The Asia Minor find[3] contained these seven types: Athena l. (Pl. II, 6), Maenad head with sakkos (Pl. II, 10), Zeus with sceptre (Pl. III, 2), Aktaion l. (Pl. III, 14), Hekate l. (Pl. III, 19), Kabeiros l. (Pl. III, 25 or 27) and Aphrodite l. (Pl. III, 35).

The contents of these two hoards correspond roughly with the pronouncedly earlier and later styles noticeable in the coinage as may be rather easily discerned at first view, for the Avola hoard had none of the staters which are of the later style, while the Asia Minor hoard contained none of the earlier staters. The most important point for argument is that the two staters common to both hoards, the Athena and Maenad with sakkos types, belong to our middle group, so that, granted the early and late character of the two hoards respectively, it is most natural to find that the types of an intermediate group are *common to both hoards.*

If, therefore, we can date the Athena and Maenad types which seem to have been consecutive issues from their reverses, and according to style are the latest staters in the Avola hoard, we should give the date of these staters as the probable date of deposit. Now the find was reported as containing besides the Lampsakene staters, one hundred and fifty silver Pegasi of Corinth and her colonies, fourteen hundred-litra gold pieces of Syracuse, one gold stater of Abydos, and four Persian daries. Löbbecke assumed, quite logically enough from his information, that the date of deposit was c. 320 B.C., the limit furnished by the silver coins. We have it, however, on the suggestion of Sir Arthur Evans,[4] that the Avola find was in reality a composite one, made up of two separate finds which had been unearthed in Sicily at about this same time. If the hoard was really made up of two separate finds — one composed of gold and one of silver coins, then the period represented by the coins in the gold hoard would extend from about

[1] Num. Chron. 1890, p. 25; Zeit. f. Num. 1890, p. 169 f.

[2] There were fourteen staters in the hoard but five of the coins were not seen by Löbbecke and two were duplicates of the seven above enumerated.

[3] Num. Chron. 1890, p. 26 f.; Zeit. f. Num., 1890, p. 178.

[4] Num. Chron. 1891, p. 297, note 22. "According to my own information more than one find has been discovered in the same Sicilian district within the last few years, and I have myself seen specimens of two hoards of very different composition, one apparently dating from the early part of the Fourth Century and the other from the beginning of the Third. The coins described by Herr Löbbecke seem to me to belong to two distinct hoards, one of early gold coins including besides the Syracusan, staters of Lampsakos and Abydos and a Persian daric; the other of the late silver coins, Pegasi, etc."

Dr. P. Orsi, in the latest account of this hoard, Atti e Mem., 1917, p. 7, note 1, states that the gold coins were contained in one clay vase, the silver in another, according to report, but agrees with Evans that this report may have been incorrect and that there were probably two separate and distinct finds.

413 B.C., the date of the Syracusan gold coins, to whatever date we should assign to the Athena and Maenad heads, the latest staters in the hoard according to the criteria of style.

It so happens that these two types are very closely allied by their reverses to the staters bearing a head of a Persian satrap (Pl. II, 15-17). This type follows in our scheme next but one[1] upon the aforesaid types. The Persian satrap type appears in three examples, all very rare and interesting coins. The specimen, Pl. II, 15, from the Hunterian collection in Glasgow, was long the only example known. Later on, the Paris cabinet acquired the stater, Pl. II, 16; and M. Jameson has the third specimen, Pl. II, 17. The Glasgow coin does not give any suggestion of being more than a typical head of a satrap, but the two newer examples show most decidedly that portraiture is here intended, for there is more expression in both these heads. This portrait can hardly be that of anyone else than Orontas, who was satrap of Mysia and Ionia, c. 362-345 B.C.[2] Orontas struck silver coins at Lampsakos bearing a head of Athena helmeted to the left, not dissimilar in style to the Athena head on the gold staters, and having on the reverse the Lampsakene arms, a fore-part of Pegasos and his name OPONTA.[3]

The occasion of the issue of these satrapal coins at Lampsakos is undoubtedly as Six first pointed out, and Babelon has further developed, the revolt of the satraps against Artaxerxes II Mnemon, c. 362 B.C. If Orontas issued the staters of Lampsakos with the portrait of himself on the occasion of the revolt against the Persian King, c. 362 B.C., then the staters with Athena and Maenad heads were issued just before this date, provided our sequence of types be correct.

A consideration of the style of the coins which belong to our third group will perhaps serve to strengthen this conclusion. Here we are wholly on that rather unstable and shifting basis of style. The third group of staters begins, according to our arrangement, almost immediately with the Hera and Zeus staters (Pl. II, 30 f.) which represent the highest attainment of art on Lampsakene staters. The Zeus head, particularly that which was clearly the earliest die, Pl. II, 31-35, is one of the most perfect creations

[1] A facing helmeted head of Athena, Pl. II, 14, intervenes.

[2] Babelon, Traité II², p. 105 f, explains the gold issue as insurrectional, and thus accounts for the lack of any royal inscription or type. The head has been ascribed to Tissaphernes and Pharnabazos by Head, but in the Hist. Num.², p. 597, this eminent authority agrees with Babelon's assignment to Orontas. The former satraps come too early in the Fourth Century for this Lampsakene stater which, according to our classification, was struck c. 360 B.C., and Spithridates, a third possibility inasmuch as we have his satrapal coins from our mint, comes too late, since his coins were probably struck under the authority of Darius III Codomannus when the latter was preparing to resist the invasion of Alexander.

[3] Babelon, Traité II², pl. lxxxviii, 15.

of the die-sinker, a majestic yet genial type of Zeus head. The later dies (Pl. III, 3-7), excellent as they seem by themselves, are much harder and more expressionless than the first die, this being due to the fact that the type first created was merely copied over and over again. The heads of Nike, of Herakles as Omphale, of Aktaion and Hekate are all on the highest plane of excellence. These types are the culmination of the art of the series and, given the number of types which precede these staters and the admitted beginning of the coinage, c. 390 B.C., the date c. 350 B.C. would seem to suit the style of these staters and to harmonize with the inferences we have drawn from the study of the reverses. But, of course, the only soundly based date is that which we can infer from the stater which, as seems likely, bears the portrait head of Orontas. Then, if our order of issues is correct, the latest coins of the Avola hoard were struck just previous to 362 B.C., which furnishes us with an approximate date for the burial of this hoard.

The date of deposit of the Asia Minor hoard will depend upon the date which is chosen for the end of the Lampsakene issues since it contained examples of staters, which, according to our arrangement, are the latest of the series. The date given in the British Museum Catalogue for the lower limit of the stater coinage is "c. 350 B.C." This date according to the foregoing hypotheses would be much too early. Six and Babelon have supposed that the stater coinage of Lampsakos was not immediately ended by the appearance of Philip's staters, c. 359-336 B.C., but only when Alexander's staters had begun to flood the markets of Asia Minor. This view seems in itself more probable, and, it should be noted, is that accepted also for the period of cessation of the issues of electrum at Kyzikos.[1] Furthermore, there are two staters in the third group which *ex hypothesi* would be subsequent to c. 350 B.C., which bear types quite possibly referring to Alexander the Great. These are, namely, the stater with a youthful male head without attributes, Pl. IV, 22, and the Zeus Ammon head, Pl. III, 23, both unique coins in the Paris cabinet. The former has been called an Achilles head, but this is obviously a mere guess. The head is the only male head in the series which has no defining attribute to enable us to describe it as that of some deity. There is also a female head without attributes in the series which has been called that of the eponomous heroine of Lampsakos, who was called Lampsake. This is far from being an improbable suggestion since the local nymph is one of the commonest of all the Greek coin types. For the male head without attributes, we are at a loss for a name. It can scarcely be a personification like that of the founder,

[1] Cf. Die Elektron Prägung von Kyzikos by H. v. Fritze in Nomisma VII.

for in this case the reputed founder was a woman, and her grave was even shown at Lampsakos in Plutarch's day. Six once suggested that this head represented Alexander the Great. He considered that the Zeus Ammon type and the Maenad head with the flying hair, Pl. I, 32f., represented Alexander's reputed father whom he claimed as divine ancestor, and his mother, Olympias, about whose participation in the orgiastic rites of the Bacchic cult many stories were told. The interpretation of the Maenad head as that of Olympias may easily be dismissed as over-fanciful. Besides it is one of the early staters, not one of the later style. But it may be conceded that the reverse of the young male head without attributes, otherwise nameless, has a somewhat Alexandrine character; that its reverse type is of the same style as that of the Zeus Ammon stater, and that both belong to a period which we should regard as towards the end of the series. All this being so, there is some reason for thinking that the two types may refer to Alexander, the former being a sort of disguised portrait. These types may, as Six ingeniously imagined, have been chosen by the city to show its gratitude to Alexander for his forebearance in sparing the inhabitants in his victorious march into Asia Minor in 334 B.C.[1] If then these are types connected with Alexander and only three more types subsequent to these are known, we may assume that the coinage lasted down to c. 330 B.C. This dating harmonizes with the supposition that Orontas struck the satrapal portrait stater, and perhaps also the Athena head, Pl. II, 5-8, for this type would then fall into the exact middle of the period c. 390-330 B.C., and its style quite suits such a date.

The discussion of the date of the beginning of the coinage will be taken up in connection with the discussion of the first type, Herakles and the serpent — the type which gives us the data for determining when the coinage began.

A valuable test of the order of the Lampsakene issues as here proposed, is afforded by the opportunity to place an unpublished type in the series and to see whether the style of the reverse and the other criteria, style of obverse, size of type and flan, height of relief, are in accord. The Jameson stater, No. 38, fig. 15 (see Cat. of Types), a youthful Dionysos type, is very easily recognized as one of the latest issues from the style of both obverse and reverse. The Pegasos is done in the negligent style of the close of the series — a style which, at first glance, is suggestive of the earliest issues in the treatment of the wings, but which is soon seen to be not the early imperfect style but the debased style which followed the high perfection of the coins of the middle and third group. This negligent style

[1] Droysen, Hist. de l'Hellénisme, I, p. 189.

of Pegasos is found in the staters, Pl. III, 12 f, and the closest approximation to our stater is the reverse of Pl. III, 23, the Zeus Ammon type. This position in the series is entirely in harmony with the larger size of the obverse type and flan, and the broader style of the head. The summary treatment of the hair, the large size of the ivy leaves are on a par with these features of the bearded Dionysos head, Pl. III, 21. While the stater lacks the delicacy of the early Maenad heads, Pl. I, 19, 20, and of the female Satyr, Pl. III, 13, it is dignified and noble in expression, and like all of the Lampsakene types with the exception of the head copied from Athenian coinage Pl. III, 29, it has beauty and originality of style.

CATALOGUE OF TYPES

1 Infant Herakles, nude, kneeling to r., strangling a serpent with each hand, r. arm raised, l. lowered; crepundia over l. shoulder and under r. arm; ground line.

℞ Forepart of a winged horse to l., rounded wings, feathered, l. raised, r. lowered; l. wing in three sections, the one joining the body plain, middle one dotted, outer one feathered; row of dots at termination of horse's body.

a. 18 x 14mm. 8.44 gr. Boston (Greenwell-Warren); I-*a*.[1] **Plate I, 1**

Cat. Ivanoff, No. 192 (S. W. & H., June, 1863); Brandis, Münz.-Mass. u. Gewichtswesen, p. 409; Greenwell, Num. Chron. 1880, p. 12, pl. i, 11; Gardner, Types of Greek Coins, p. 33, pl. xvi, 8; Regling, Sammlung Warren, No. 1002, pl. xxiii; Gardner, Gold Coinage of Asia, in the Proceedings of the British Academy, III, 1908, pl. ii, 9; Jour. Inter. de Num. (hereinafter abbreviated to J. I. N.) 1902, 1a, pl. i, 1.

b. 16mm. 8.43 gr. (pierced). Paris (Old Collection); II-*β*. **Plate I, 2**

Pellerin, Recueil, II, p. 51, pl. xlix, 22; Sestini, Lettere e Dissertazioni (Livorno, 1779) IV, p. 70, pl. v, 2; Eckhel, Doctrina Num. Vet. II, p. 456; Mionnet, Cat. d'Empreintes, p. 42, No. 827, and Descr. de Méd. II, p. 559, No. 284; Sestini, Stateri Antichi, p. 64, No. 13, pl. vi, 10; Waddington, Rev. Num. 1863, pl. x, 5; Brandis, *op. cit.*, p. 409; Babelon, Traité II[2], No. 2529, pl. clxx, 28; J. I. N. 1902, No. Ib, pl. i, 2.

a and *b*, different obverse and reverse dies.

2 Helle, wearing chiton and himation, seated sidewise on a ram which advances to l. with raised fore-legs.

℞ Similar.

a.[2] 16mm. 8.41 gr. Berlin (Prokesch-Osten); I-*a*. **Plate I, 3**

Prokesch-Osten, Arch. Zeitung, 1849 (Denk. u. Forsch. No. 10, p. 97), pl. x, 2; Gerhard, *ibid.*, 1853 (D. u. F. No. 58, p. 116), pl. lviii, 9; Prok.-O., Inedita meiner Sammlung, 1854, No. 282, p. 50, pl. iv, 8; Brandis, *op. cit.*, p. 410; Zeit. f. Num. 1877, p. 5; J. I. N. 1902, 2a, pl. i, 3.

[1] The Roman and Greek numerals following the weight and present location of each coin indicate the obverse and reverse dies in serial numbering for *each* type, and their combinations.

[2] Example *a* was purchased in 1848 at Livadhia (Lebedeia, Boiotia), by Prokesch-Osten who describes another specimen (Arch. Zeit. 1849, p. 97) of the same weight but less well preserved, which he bought in Orchomenos and ceded to H. P. Borrell, in Smyrna. This second specimen is doubtless the de Luynes coin, *b*.

b. 16mm. 8.44 gr. Paris (de Luynes); II-*a*. **Plate I, 4**

Brandis, *op. cit.*, p. 410; Babelon, Traité II², No. 2530, pl. clxx, 29; Cat. Borrell, No. 134 (S. & W., London, 1852); J. I. N. 1902, 2b, pl. i, 4.

a and *b*, different obverse dies but same reverse die. Reverse die of Type 2 identical with that of Type 1 *b*, the only case in the whole series where the same reverse die is combined with two different obverse dies.

3 Young male head, Perseus (?), helmeted l., hair falls in loose locks; visor of helmet ends in a volute ornament; above volute is a small wing; below the wing, a volute.

℞ Similar, horse to r., r. wing raised, l. lowered; middle section of r. wing widens out from a row of dots to an even row of feathers.

a. 16mm. 8.40 gr. Paris; unique.[1] **Plate I, 5**

Babelon, Traité II², No. 2547, pl. clxxi, 14. ("tête imberbe d'Atys").

4 Orpheus, wearing "Phrygian" cap, with flaps at back and side, talaric chiton girdled at waist, and himation thrown back from shoulders, seated to r. on rock; rests r. elbow on knee and supports chin with r. hand; on l. knee supports lyre from which hangs a strap; ground line.

℞ Similar, no row of dots at termination of horse's body.

a. 16mm. 8.40 gr. Berlin (Löbbecke); I-*a*. **Plate I, 6**

From the Avola Find. Löbbecke, Zeit. f. Num. 1890, p. 170, No. 9, pl. vi (x), 9; J. I. N. 1902, 4b, pl. i, 7.

b. 16mm. 8.43 gr. Paris (Waddington); II-*β*. **Plate I, 7.**

Babelon, Rev. Num. 1897, p. 319, No. 868, pl. vii, 12 = Inv. Wadd. pl. ii, 12, and Traité II², No. 2532, pl. clxx, 31; J. I. N. 1902, 4a, pl. i, 6.

a and *b*, different obverse and reverse dies.

5 Thetis or a Nereid, semi-nude, limbs draped, hair long, seated to l. on dolphin to r., holding in r. hand knemides, and on l. arm, a shield (arms of Achilles?).

℞ Similar.

a. 16mm. 8.41 gr. Paris (Old Coll.); unique. **Plate I, 8**

Mionnet, Cat d'Empreintes, p. 42, No. 825; Sestini, Lett. e Diss. (Berlin, 1805), VII, p. 36, pl. iii, 6, and Stateri Antichi, p. 65, No. 16, pl. vi, 13; Mionnet, Descr. de Méd. II, p. 559, No. 285; Brandis, *op. cit.*, p. 410; Babelon, Traité II², No. 2531, pl. clxx, 30; Imhoof-Blumer, J. I. N. 1908, p. 134, pl. viii, 44; J. I. N. 1902, 3a, pl. i, 5.

6 An archer kneeling to r. on r. knee, l. elbow resting on l. knee, holding in l. hand an upright bow, together with an arrow; his r. arm drawn back from the body hangs down with open palm; he wears a cap with loose flaps bound with a ribbon of which the ends are tied in a bow-knot; a long-sleeved chiton girdled at the waist; *anaxyrides*, and shoes turned up at the toe; over the chiton, he wears a close-fitting jacket of some padded material or leather, laced down the front, with short caps over the arms; ground line.

℞ Similar.

[1] Another example was once in the Pozzi Collection, but it was possibly not genuine. It does not appear in the Pozzi Sale Catalogue, 1920.

a. 16mm. 8.42 gr. Berlin (Löbbeeke); unique. **Plate I, 9**

J. I. N. 1902, p. 8, and Zeit. f. Num. xxxii, pp. 1-14, pl. i, 1.

7 Nike, winged, semi-nude, with drapery about the legs, kneels l. on a ram seated to l.; with her l. hand she seizes l. horn of ram, and holds back its head, while in her r. hand, she holds a knife pointed at the ram's throat.

℞ Similar.

a. 16mm. 8.42 gr. London (formerly Sir H. Weber); unique. **Plate I, 10**

Greenwell, Num. Chron. 1885, p. 10, pl. i, 9; Babelon, Traité II², No. 2534, pl. clxx, 33; Head, Hist. Num. p. 529, fig. 276; J. I. N. 1902, 6a, pl. i, 9.

The example in Cat. Monn. gr. ant., No. 509, pl. xi (Rollin et Feuardent, Paris, May, 1910), weighing only 3.40 gr., was a forgery and withdrawn from the sale.

8 Head of a Satyr, facing, slightly to l., with straight hair brushed back from the forehead, and flowing beard cropped short between the long drooping moustache, and with pointed animal's ears.

℞ Similar.

a. 15mm. 8.41 gr. Berlin (Löbbeeke); I-*a*. **Plate I, 11**

From the Avola Find. Löbbecke, Zeit. f. Num. 1890, p. 169, No. 3, pl. vi (x), 3; J. I. N. 1902, 32b, pl. iii, 16.

b. 15mm. 8.43 gr. Paris (Waddington); I-β. **Plate I, 12**

Babelon, Rev. Num. 1897, p. 318, No. 851, pl. vii, 9 = Inv. Wadd. pl. ii, 9, and Traité II², No. 2561, pl. clxxii, 5; J. I. N. 1902, 32c, pl. iii, 17.

c. 16mm. 8.39 gr. Boston (Greenwell-Warren); II-β. **Plate I, 13**

From the Avola Find. Greenwell, Num. Chron. 1890, p. 25, pl. iii, 11; Regling, Samm. Warren, No. 1011, pl. xxiii; J. I. N. 1902, 32a, pl. iii, 15.

d. 16mm. 8.33 gr. Jameson, Paris; II-β. **Plate I, 14**

Cat. Sandeman, No. 236, pl. iv (S. W. & H., London, June, 1911); Cat. Jameson, No. 1444a, pl. xcv (Paris, 1913).

a-d, two obverse dies — *a* and *b*, *c* and *d* identical; two reverse dies — *b*, *c*, and *d*, identical.

9 Head of Demeter r., wearing corn wreath, hair rolled.

℞ Similar.

a. 15mm. 8.38 gr. Berlin (Löbbeeke); I-*a*. **Plate I, 15**

From the Avola Find. Löbbecke, Zeit. f. Num. 1890, p. 169, No. 4, pl. vi (x), 4; J. I. N. 1902, 17b, pl. ii, 10.

b. 14mm. 8.42 gr. London; II-β. **Plate I, 16**

From the Avola Find. Wroth, Num. Chron. 1890, p. 324, No. 24, pl. xix, 14, and B. M. C. Mysia, No. 23, pl. xix, 1; Farnell, Cults of the Greek States, III, Coin Plate, 20; Babelon, Traité II², No. 2545, pl. clxxi, 12; Num. Chron. 1891, p. 116; J. I. N. 1902, 17a, pl. ii, 9.

a and *b*, different obverse and reverse dies.

10 Head of Dionysus l., bearded, wearing ivy wreath with a bunch of ivy berries over the forehead.

℞ Similar.

a. 16mm. 8.41 gr. London (formerly Sir H. Weber); unique. **Plate I, 17**

Greenwell, Num Chron. 1893, p. 85; Weber, Num. Chron. 1896, p. 23, No. 43, pl. ii, 19; Babelon, Traité II², No. 2553; J. I. N. 1902, 24a, pl. iii, 1.

11 Head of a Maenad l., hair rolled, loose locks falling on neck; wearing ivy wreath with berries, ear-ring with a single pendant, and necklace.

℞ Similar.

a. 17mm. 8.42 gr. Berlin (Fox); I-*a*. **Plate I, 18**

Numismata Antiqua (Pembroke Coll.), 1746, pl. iv, 9; Sestini, Stateri Antichi, p. 63, No. 8, pl. vi, 6; Cat. Pembroke, No. 880 (Sotheby, London, July, 1848); Brandis, *op. cit.*, p. 410; Leake, Num. Hell. (As. Gr.) p. 72; Six, Num. Chron. 1888, p. 111, No. 9; Babelon, Traité II², No. 2556, pl. clxxi, 24; J. I. N. 1902, 27a, pl. iii, 10.

b. 16mm. 8.45 gr. (Formerly Philipsen); II-β. **Plate I, 19**

Cat. Philipsen, No. 1791, pl. xxi (Hirsch XXV, Munich, Nov. 1909); Cat. Monn. gr. ant. pl. xxix, 794 (Naville et Cie, Geneva, 1922).

c. 18mm. 8.38 gr. Jameson, Paris; III-β. **Plate I, 20**

Found in Egypt. Babelon, Traité II², No. 2556, pl. clxxi, 23; Cat. Jameson, No. 1438, pl. lxxiii, Paris, 1913. From the Avierino Coll. = (?) Dr. Eddé, Ras. Num. 1909, p. 55.

a–c, three obverse dies; two reverse dies — *b* and *c* identical.

12 Head of young Pan l., beardless, with a goat's horn.

℞ Similar.

a. 16mm. 8.37 gr. Boston (Perkins); unique. **Plate I, 21**

Found in Crete. Svoronos, J. I. N. 1899, p. 301, pl. IΔ′, 12; Cat. of Perkins Coll. pl. v, 428; Babelon, Traité II², No. 2560, pl. clxxii, 4; J. I. N. 1902, 31a, pl. iii, 14.

13 Head of young Hermes l., hair short, wearing flat petasos, without wings, on top of which, a button; band of petasos visible.

℞ Similar, but middle section of r. wing has now evolved into a "ladder pattern" which begins to be seen also on the lowered l. wing.[1]

a. 16mm. 8.45 gr. Berlin (Löbbecke); I-*a*. **Plate I, 22**

From the Avola Find. Löbbecke, Zeit. f. Num. 1890, pl. vi (x), 7; J. I. N. 1902, 18b, pl. ii, 12.

b. 17mm. 8.55 gr. (Formerly O'Hagan); II-β. **Plate I, 23**

Cat. O'Hagan, No. 535, pl. ix (S. W. & H., London, May, 1908).

c. 16mm. 8.38 gr. Jameson, Paris (formerly Duruflé); III-γ. **Plate I, 24**

Cat. Jameson, No. 1436, pl. lxxiii (Paris, 1913).

d. 17mm. 8.45 gr. Paris (Waddington); IV-γ. **Plate I, 25**

Babelon, Rev. Num. 1897, p. 318, No. 860, pl. vii, 4 = Inv. Wadd. pl. ii, 4, and Traité II², No. 2546, pl. clxxi, 13; J. I. N. 1902, 18a, pl. ii, 11.

e. 18mm. 8.40 gr. Boston (Greenwell-Warren); V-δ. **Plate I, 26**

Greenwell, Num. Chron. 1897, p. 258, pl. xi, 11; Regling, Samm. Warren, No. 1013, pl. xxiii; J. I. N. 1902, 18c.

a–e, five obverse dies; four reverse dies—*c* and *d* identical.

[1] The feathered end of the wing also from now on shows a fine cross-hatching visible first on types Nos. 11 and 12.

14 Head of Apollo l., hair rolled, wearing a laurel wreath, and a knotted bandelette, or fillet, which passes over his front hair, back of the ears, and hangs down on either side.

℞ Similar.

a. 17mm. 8.40 gr. Munich; I-*a*. **Plate I, 27**

Sestini, Stateri Antichi, p. 63, No. 9, pl. vi, 7; Mionnet, Descr. de Méd. Sup. V, p. 369, No. 544; Brandis, *op. cit.* p. 410; Six, Num. Chron. 1888, p. 111, No. 7, also p. 110, note 47; Babelon, Traité II², No. 2543, pl. clxxi, 9; J. I. N. 1902, 15a, pl. ii, 6.

b. 18mm. 8.41 gr. Jameson, Paris (formerly Warren); II-*β*. **Plate I, 28**

Cat. Jameson, No. 1440, pl. lxxiii (Paris, 1913); Regling, Samm. Warren, No. 1010, pl. xxiii; Cat. Well-known Amateur (Warren), No. 99, pl. iii (S. W. & H., London, May, 1905); Babelon, Traité II², No. 2543, pl. clxxi, 10.

a and *b*, different obverse and reverse dies.

15 Head of bearded Herakles l. in lion's scalp.

℞ Similar.

a. 15mm. 8.40 gr. Berlin (Löbbecke); unique. **Plate I, 29**

From the Avola Find. Löbbecke, Zeit. f. Num. 1890, p. 169, No. 6, pl. vi (x), 6; Babelon, Traité II², No. 2557, pl. clxxii, 1; J. I. N. 1902, 28a, pl. iii, 11.

16 Head of Demeter l., wearing a corn wreath and veil, ear-ring with triple pendant, and necklace.

℞ Similar.

a. 17mm. 8.50 gr. Paris (Old Coll.); I-*a*. **Plate I, 30**

Cat. Wellenheim I, 4890 (Vienna, 1844); Six, Num. Chron. 1888, p. 111, No. 8, also 1894, p. 310; Babelon, Traité II², No. 2544, pl. clxxi, 11; J. I. N. 1902, 16b, pl. ii, 8.

b.[1] 17mm. 5.29 gr. (plated). London; II-*β*. **Plate I, 31**

Wroth, B. M. C. No. 27, pl. xix, 5; J. I. N. 1902, 16a, pl. ii, 7.

a and *b*, different obverse and reverse dies.

17 Head of a Maenad thrown back, with flying hair, wearing ivy wreath, with berries over the forehead, ear-ring with triple pendant, and necklace; interwoven in her hair is a diadem, ends flying, sometimes fringed.

℞ Similar.

a. 16mm. 8.44 gr. Boston (Perkins, formerly Ashburnham); I-*a*. **Plate I, 32**

Cat. Ashburnham, No. 151, pl. iv (S. W. & H., London, May, 1895); Cat. of Perkins Coll. pl. v, 429; J. I. N. 1902, 25e.

b. 17mm. 8.46 gr. London; II-*a*. **Plate I, 33**

Head, Guide, p. 37, No. 15, pl. xviii, 15; B. M. C. Mysia, No. 29, pl. xix, 7; J. I. N. 1902, 25c, pl. iii, 6.

[1] The second example *b*, is a plated coin, which has been regarded by the British Museum authorities as an *ancient* forgery. Its appearance at first glance is not reassuring, and one's first impulse is to condemn it from its brassy look as a modern product. The obverse, however (note the *single-drop* ear-ring), looks like ancient work, and in the absence of any stigmata of a modern fabrication, it seems safe to consider it, with Wroth, as an ancient plated coin.

c. 17mm. 8.46 gr. (Formerly Caruso); II-β.

Cat. Monn. gr. ant. (Duruflé), No. 508, pl. xii (R. et F., Paris, May, 1910); Cat. Collezione Caruso, No. 68, pl. ii (C. & E. Canessa, Naples, June, 1923).

d. 16mm. 8.49 gr. Jameson, Paris; III-γ. **Plate I, 34**

Cat. Jameson, No. 1444, pl. lxxiv (Paris, 1913) = (?) Dr. Eddé, Rass. Num. 1909, p. 55.

e. 16mm. 8.46 gr. Cambridge (McClean); III-δ. **Plate I, 35**

f. 16mm. 8.47 gr. Bement, Philadelphia; IV-δ.

Cat. Gr., Röm. u. Byz. Münzen, No. 465, pl. xv (Hirsch, XXXIV, Munich, May, 1914); Cat. C. S. Bement Coll., pl. xvii, 256 (New York, 1921).

g. 16mm. 8.54 gr. Yakountchikoff, Petrograd (formerly Hoskier); V-δ.

Cat. Hoskier, No. 371, pl. xiii (Hirsch XX, Munich, Nov. 1907 = Hirsch XVIII, No. 2440, Munich, 1907).

h. 16mm. 8.45 gr. ——; V-ϵ.

Cat. Hirsch XII, 1904, No. 230.

i. 16mm. 8.40 gr. (Formerly Pozzi); VI-δ.

Cat. Monn. gr. ant., pl. lxvii, 2229 (Naville et Cie, Geneva, 1920).

j. 16mm. 8.38 gr. ——; VI-δ.

Cat. Monn. gr. ant., pl. xxix, 792 (Naville et Cie, Geneva, 1922).

k. 16mm. 8.42 gr. (Formerly Consul Weber); VI-ϵ.

l. 16mm. —— gr. In commerce (1914); VI-ς.

m. 16mm. 8.40 gr. ——; VI-ζ.

Cat. Monn. gr. ant., pl. xxix, 793 (Naville et Cie, Geneva, 1922).

n. 17mm. 8.43 gr. Berlin (Prokesch-Osten); VII-η. **Plate II, 1**

Cat. Thomas, No. 1998 (Sotheby, London, 1844); Von Sallet, Königl. Münz-kabinet, 1877, p. 86, No. 212; J. I. N. 1902, 25d.

o. 17mm. 8.48 gr. Glasgow (Hunter); VIII-θ. **Plate II, 2**

Combe, Mus. Hunter, p. 165, No. 2, pl. xxxi, 23; Mionnet, Descr. de Méd. II, p. 560, No. 290; Sestini, Stateri Antichi, p. 63, No. 7, pl. vi, 5; Brandis, *op. cit.*, p. 410; Macdonald, Hunter Coll. II, p. 271, No. 4; J. I. N. 1902, 25f.

p. 17mm. 8.44 gr. Paris (Waddington); IX-ι. **Plate II, 3**

Babelon, Rev. Num. 1897, p. 318, No. 862, pl. vii, 6 = Inv. Wadd., pl. ii, 6, and Traité II^2, No. 2554, pl. clxxi, 21; J. I. N. 1902, 25b, pl. iii, 5.

q. 18mm. 8.45 gr. Paris (de Luynes); IX-ι. **Plate II, 4**

De Luynes, Choix, pl. ix, 18; Blanchet, Monn. gr., pl. v, 5; Brandis, *op. cit.*, p. 409; Imhoof-Blumer, J. I. N. 1908, p. 130, pl. viii, 35; J. I. N. 1902, 25a, pl. iii, 4.

a–q (seventeen specimens) nine obverse dies — *b* and *c*; *d* and *e*; *g* and *h*; *i-m*; *p* and *q*, identical. Ten reverse dies — *a* and *b*; *e-g*, *i*, *j*; *h*, *k*; *p*, *q*, identical.

18 Head of Athena l., wearing crested Athenian helmet with raised cheek-piece and scroll ornament; ear-ring with triple pendant, and necklace.

℞ Similar.

a. 18mm. 8.42 gr. Paris (Waddington); I-*a*. **Plate II, 5**

Babelon, Rev. Num. 1897, p. 318, No. 858, pl. vii, 2 = Inv. Wadd., pl. ii, 2, and Traité II^2, No. 2540, pl. clxxi, 6; J. I. N. 1902, 12a, pl. ii, 1.

b. 17mm. 8.42 gr. Boston (Greenwell-Warren); II-*a*. **Plate II, 6**

From the Asia Minor (Troad) Find. Greenwell, Num. Chron. 1890, p. 26, pl. iii, 12; Regling, Samm. Warren, No. 1008, pl. xxiii; J. I. N. 1902, 12b, pl. ii, 2.

c. 16mm. 8.37 gr. Glasgow (Hunter); III-β. **Plate II, 7**

Macdonald, Hunter. Coll. II, p. 271, No. 3, pl. xlviii, 3; J. I. N. 1902, 12d.

d. 17mm. 8.42 gr. Berlin (Löbbecke); IV-. **Plate II, 8**

From the Avola Find. Löbbecke, Zeit. f. Num. 1890, p. 169, No. 5, pl. vi (x), 5; J. I. N. 1902, 12c, pl. ii, 3.

a–d, four obverse dies; two reverse dies—*a* and *b*, *c* and *d*, identical.

19 Head of a Maenad l., wearing a wreath composed of vine leaves and bunches of grapes, ear-ring with triple pendant, necklace and sphendone.

℞ Similar.

a. 16mm. 8.41 gr. Jameson, Paris; I-*a*. **Plate II, 9**

Found in Egypt. Cat. Jameson, No. 1437, pl. lxxiii; Dr. Eddé, Rass. Num. 1909, p. 55.

b. 17mm. 8.42 gr. Boston (Greenwell-Warren); II-β. **Plate II, 10**

From the Asia Minor Find. Greenwell, Num. Chron. 1890, p. 26, pl. iii, 14; Regling, Samm. Warren, No. 1015, pl. xxiii; J. I. N. 1902, 26c, pl. iii, 8.

c. 17mm. 8.44 gr. Paris (Waddington); III-β. **Plate II, 11**

Babelon, Rev. Num. 1897, p. 318, No. 863, pl. vii, 7 = Inv. Wadd., pl. ii, 7, and Traité II², No. 2555, pl. clxxi, 22; J. I. N. 1902, 26a.

d. 16mm. 8.45 gr. Berlin (Löbbecke); IV-γ. **Plate II, 12**

From the Avola Find. Löbbecke, Zeit. f. Num. 1890, p. 170, No. 8, pl. vi (x), 8; J. I. N. 1902, 26d, pl. iii, 9.

e. 18mm. 8.40 gr. Berlin (Imhoof-Blumer); V-γ. **Plate II, 13**

Imhoof-Blumer, J. I. N. 1908, p. 130, pl. viii, 34; J. I. N. 1902, 26b, pl. iii, 7.

a–e, five obverse dies; three reverse dies—*b* and *c*, *d* and *e*, identical.[1]

20 Head of Athena, facing three-quarters to r., wearing triple-crested helmet, round ear-ring, and necklace.

℞ Similar.

a. 16mm. 8.42 gr. Paris (Waddington); unique. **Plate II, 14**

Num. Chron. 1894, p. 310; Babelon, Rev. Num. 1897, p. 318, No. 859, pl. vii, 3 = Inv. Wadd., pl. ii, 3, and Traité II², No. 2541, pl. clxxi, 7; J. I. N. 1902, 18a, pl. ii, 4.

21 Head of the Persian satrap, Orontes, l., bearded, wearing tiara with loose, untied flaps.

℞ Similar.

a. 17mm. 8.43 gr. Glasgow (Hunter); I-*a*. **Plate II, 15**

Combe, Mus. Hunter, p. 165, No. 1, pl. xxxi, 22; Sestini, Lett. e Diss. IV (Livorno, 1779), p. 69, No. 1, and Stateri Antichi, p. 63, No. 5, pl. vi, 4; Mionnet, Descr. de Méd. II, p. 560, No. 289; Leake, Num. Hell. (As. Gr.), p. 148; De Koehne, Mémoires, pl. xii, 36; Rev. Num. 1861, p. 16, pl. ii, 3; Num. Zeit. 1871, p. 425; Macdonald, Hunter. Coll. II, p. 271, No. 2, pl. xlviii, 2; P. Gardner, Gold Coinage of Asia, Proc. of Brit. Academy, 1908, pl. ii, 12; J. I. N. 1902, 34a, pl. iii, 21.

[1] The reverse dies c and *d* have become interchanged in setting up the casts.

b. 17mm. 8.43 gr. Paris; II-β. Plate II, 16

Babelon, Traité II², No. 2563, pl. clxxii, 7.

c. 16mm. 8.34 gr. Jameson, Paris; III-γ. Plate II, 17

Cat. Jameson, No. 1443a, pl. xcv (Paris, 1913).

a–c, different obverse and reverse dies.

22 Head of Dionysus l., bearded, wearing ivy wreath with a bunch of ivy berries over the forehead.

℞ Similar; middle section of r. wing feathered as on types 3-12 and 32 ff.

a. 17mm. 8.30 gr. Paris (Waddington); I-*a*. Plate II, 18

Babelon, Rev. Num. 1897, p. 318, No. 861, pl. vii, 5 = Inv. Wadd., pl. ii, 5, and Traité II², No. 2553, pl. clxxi, 20; J. I. N. 1902, 24c, pl. iii, 3.

b. 18mm. 8.30 gr. Jameson, Paris (formerly Duruflé); I-*a*. Plate II, 19

Cat. Jameson, No. 1443, pl. lxxiii (Paris, 1913).

a and *b*, same obverse and reverse dies.

23 Head of Helios l., hair in loose locks, on a radiate disk.

℞ Similar.

a. 16mm. 8.43 gr. Jameson, Paris; I-*a*. Plate II, 20

Found in Egypt. Cat. Jameson, No. 1435, pl. lxxii (Paris, 1913). From the Avierino Coll. = (?) Dr. Eddé, Rass. Num. 1909, p. 56.

b. 17mm. 8.43 gr. Paris (Waddington); II-*a*. Plate II, 21

Head, Hist. Num., p. 530, fig. 281; Six, Num. Chron. 1888, p. 111, No. 5; Babelon, Rev. Num. 1897, p. 319, No. 857, pl. vii, 11 = Inv. Wadd., pl. ii, 11, and Traité II², No. 2551, pl. clxxi, 18; J. I. N. 1902, 22a, pl. ii, 21.

a and *b*, different obverse, but same reverse dies.

24 Bearded head of Zeus l., wearing laurel wreath.

℞ Similar.

a. 18mm. 8.43 gr. Jameson, Paris; I-*a*. Plate II, 22

From the Avola Find. Cat. Gr. Münzen, No. 617 (Hirsch XVI, Munich, 1906); Cat. Jameson, No. 1438, pl. lxiii (Paris, 1913).

b. 18mm. —— gr. In commerce; II-*a*. Plate II, 23

Head, Hist. Num., p. 530, fig. 279 (from an electrotype in the Brit. Mus.); J. I. N. 1902, 8b, pl. i, 12.

c. 17mm. 8.45 gr. Paris (de Luynes); III-*a*. Plate II, 24

De Luynes, Choix, pl. x, 17; Blanchet, Monn. gr., pl. v, 6; Brandis, *op. cit.*, p. 410; Babelon, Traité II², No. 2536, pl. clxxi, 2; J. I. N. 1902, 8c, pl. i, 13.

d. 18mm. 8.40 gr. In commerce (1902); IV-β.

J. I. N. 1902, 8a, pl. ii, 11.

a–d, four obverse dies; two reverse dies — *a–c*, identical.

25 Ge, wearing girdled chiton, and himation, rising l. from the earth, holding in r. hand three ears of corn; behind her, two ears of corn and vine bearing two bunches of grapes; she wears corn wreath (?); ground line.

℞ Similar.

a. 17mm. 8.37 gr. London (Payne-Knight); I-*a*. Plate II, 25

Payne-Knight, Nummi Veteres, p. 130, No. 1; Millingen, Anc. Greek Coins, p. 69, No. 1, pl. v, 7; Mionnet, Descr. de Méd., Supp. V, p. 371, No. 556; Head, Guide, p. 37, No. 16, pl. xviii, 16, and Hist. Num., p. 529, fig. 277; B. M. C. Mysia, No. 26, pl. xix, 4; Gardner, Types, p. 174, pl. x, 25; Babelon, Traité II², No. 2533, pl. clxx, 32; Gardner, Gold Coinage of Asia, Proc. Brit. Academy, 1908, pl. ii, 11; J. I. N. 1902, 7a, pl. i, 10.

b. 17mm. 8.37 gr. (Formerly Sir H. Weber, London); I-*a*. Plate II, 26

J. I. N. 1902, 7b.

a and *b*, same obverse and reverse dies.

26 Nike, winged, semi-nude, kneeling r. before a trophy; in l. hand, nail; in r. hand, a hammer with which she is about to attach a helmet to trophy; her hair is gathered up into a knot on crown of her head; she wears necklace.

℞ Similar.

a. 18mm. 8.43 gr. London (Bank of England Coll. ex H. P. Borrell); unique. Plate II, 27

Found in Egypt. Cf. B. M. C. Mysia, p. 82, note; Borrell, Num. Chron. 1843, p. 155; Brandis, *op. cit.*, p. 410; Head, Guide, p. 37, pl. xviii, 19; Gardner, Types, p. 173, pl. x, 24; Head, Hist. Num., p. 529, fig. 278; B. M. C. Mysia, No. 31, pl. xix, 9; Babelon, Traité II², No. 2535, pl. clxxi, 1; J. I. N. 1902, 5a, pl. i, 8.

27 Female head, the nymph Lampsaké (?) l., wearing ear-ring with triple pendant, and necklace; hair rolled; linear circle.

℞ Similar.

a. 17mm. 8.40 gr. Paris (Old Coll.); I-*a*. Plate II, 28

Pellerin, Recueil II, p. 51, pl. xlix, 2; Sestini, Lett. e Diss. (Livorno, 1779), IV, p. 69; Mionnet, Cat. d'Empreintes, p. 42, No. 826, and Descr. de Méd. II, p. 560, No. 286; Sestini, Stateri Antichi, p. 64, No. 10, pl. vi, 8; Brandis, *op. cit.*, p. 410; Six, Num. Chron. 1888, p. 111, No. 6; Babelon, Traité II², No. 2565, pl. clxxii, 9; J. I. N. 1902, 36a, pl. iii, 23.

b. 18mm. 8.32 gr. London (formerly Sir H. Weber); I-*a*. Plate II, 29

J. I. N. 1902, 36b.

a and *b*, identical obverse and reverse dies.

28 Head of Hera l., wearing stephane decorated with a palmette, and necklace.

℞ Similar.

a. 18mm. 8.42 gr. London (formerly Sir H. Weber); unique. Plate II, 30

Weber, Num. Chron. 1896, p. 23, pl. ii, 18; Babelon, Traité II², No. 2538, pl. clxxi, 4; J. I. N. 1902, 10a, pl. i, 19.

29 Head of Zeus l., bearded, hair long, wearing laurel wreath; behind neck, *sceptre* (not *thunderbolt*).

℞ Similar.

a. 19mm. 8.41 gr. Boston (Perkins); I-*a*.

Cat. of Perkins Coll., pl. v, 426; J. I. N. 1902, 9j.

b. 18mm. 8.45 gr. London; I-*β*. Plate II, 31

From the Asia Minor Find. Wroth, Num. Chron. 1889, p. 257, pl. xii, 12; B. M. C. Mysia, No. 28, pl. xix, 6; Journ. Hell. Studies, 1897, p. 85, pl. ii, 12; J. I. N. 1902, 9b, pl. i, 15.

c. 19mm. 8.42 gr. Brussels (du Chastel) ; I-β. Plate II, 32
J. I. N. 1902, 9i.

d. 18mm. 8.41 gr. London (formerly Sir H. Weber) ; I-β. Plate II, 33
J. I. N. 1902, 9o.

e. 17mm. 8.35 gr. (Formerly Late Collector) ; I-β.
Cat. Late Collector, No. 325, pl. vii (S. W. & H., London, May, 1900); J. I. N. 1902, 9m.

f. 18mm. 8.41 gr. Munich; I-γ. Plate II, 34
Riggauer, Mitt. der bayer Num. Gesellschaft, 1901, p. 142, pl. v, 3; J. I. N. 1902, 9g.

g. 18mm. 8.41 gr. Boston (Perkins) ; I-γ. Plate II , 35
Cat. of Perkins Coll., No. 427; J. I. N. 1902, 9k.

h. 18mm. 8.42 gr. Newell, New York ; I-γ.

i. 18mm. 8.42 gr. Yakountchikoff, Petrograd ; I-γ. Plate III, 1
J. I. N. 1902, 9n.

j. 18mm. —— gr. (Formerly Duruflé) ; I-γ.
Cat. Monn. gr. ant., No. 507, pl. xii (R. et F., Paris, May, 1910).

k. 19mm. 8.46 gr. Warren Coll. (Lewes); I-γ.
Regling, Samm. Warren, No. 1005, pl. xxiii.

l. 18mm. 8.44 gr. (Formerly Pozzi) ; I-γ.
Monn. gr. ant., pl. lxvii, 2239 (Naville et Cie, Geneva, 1920).

m. 18mm. 8.40 gr. Berlin (Löbbecke); I-δ. Plate III, 2
From the Asia Minor Find. Löbbecke, Zeit. f. Num. 1890, pp. 8, 178, pl. i, 11; J. I. N. 1902, 9d, pl. i, 17.

n. 19mm. 8.47 gr. (Formerly Warren) ; I-δ.
Regling, Samm. Warren, No. 1004, pl. xxiii; Cat. Well-Known Amateur, Warren, No. 97, pl. iii (S. W. & H., London, May, 1905).

o. 17mm. 8.43 gr. Paris (Old Coll.) ; I-δ.
J. I. N. 1902, 9c, pl. i, 16.

p. 18mm. 8.39 gr. New York (Metropolitan Mus., Ward); I-ϵ.
Hill, Cat. of Ward Coll., p. 100, pl. xv, 611; J. I. N. 1902, 9f.

q. 18mm. —— gr. I-ϵ.
Cat. Engel-Gros, pl. iii, 57 (Paris, 1921).

r. 18mm. 8.42 gr. (Formerly O'Hagan) ; I-ϵ.
Cat. O'Hagan, No. 534, pl. ix (S. W. & H., London, May, 1908).

s. 17mm. 8.45 gr. (Formerly Philipsen) ; II-ϵ.
Cat. Philipsen, No. 1790, pl. xxi (Hirsch XV, Munich, Nov. 1909); J. I. N. 1902, 9h, pl. i, 18.

t. 17mm. 8.40 gr. (Formerly Consul Weber) ; II-ϵ.
Cat. Weber, No. 2449, pl. xxxiv (Hirsch XXI, Munich, Nov. 1908); J. I. N. 1902, 9e.

u. 17mm. 8.50 gr. (Formerly Hoskier) ; II-ϵ.
Cat. Hoskier, No. 370, pl. xiii (Hirsch XX, Munich, Nov. 1907, ex Hirsch XVI, 1906, No. 616).

v. 19mm. 8.47 gr. Paris (Waddington); III-ϵ. Plate III, 3
Babelon, Rev. Num. 1897, p. 318, No. 857, pl. vii, 1 = Inv. Wadd., pl. iii, and Traité II^2, No. 2537, pl. clxxi, 3; J. I. N. 1902, 9a, pl. i, 14.

w. 18mm. 8.45 gr. (Formerly Fürst Ch. v. A.) ; III-ϵ. Plate III, 4

Cat. Gr. Münzen, No. 539, pl. xvi (Egger, Vienna, Jan. 1908); Cat. Röm. u. Gr. Münzen, No. 3056, pl. 28 (Merzbacher, Munich, Nov. 1909).

x. 19mm. 8.45 gr. Jameson, Paris (formerly Duruflé); IV-ς. **Plate III, 5**

Cat. Jameson, No. 1442, pl. lxxiii (Paris, 1913).

y. 19mm. 8.41 gr. Cambridge (McClean, formerly Montagu); IV-ς. **Plate III, 6**

Cat. Montagu, First Part, No. 520, pl. vii (S. W. & H., London, March, 1896); J. I. N. 1902, 9p.

z. 17mm. 8.45 gr. (Formerly de Molthein); IV-ς.

Cat. W. de Molthein, No. 1884, pl. xiv (R. et F., Paris, 1895); Cat. Prowe, No. 1242, pl. viii (Egger, Vienna, Nov. 1904); J. I. N. 1902, 9q.

aa. 18mm. —— gr. (Formerly Collection H. H.); IV-ς.

Cat. Monn. d'or antiques, pl. i, 34 (C. Platt, Paris, 1922).

bb. 19mm. 8.42 gr. (Formerly Warren)[1]; IV-ς.

Regling, Samm. Warren, No. 1003, pl. xxiii; Cat. American Artist and well-known Amateur, No. 51 (S. W. & H., London, 1910).

cc. 18mm. 8.43 gr. Bement, Philadelphia (formerly Allatini); IV-ς.

Cat. C. S. Bement Coll., pl. xvii, 255 (New York, 1921).

dd. 17mm. 8.56 gr. Petrograd (Hermitage); V-ζ. **Plate III, 7**

a–dd (thirty specimens), five obverse dies—*a-r*; *s-u*; *v*, *w*; *x-cc*, identical; seven reverse dies—*b-e*; *f-l*; *m-o*; *p-w*; *x-cc*.

30 Head of Nike l., wearing wreath of myrtle (?); hair rolled; small wing springs from her neck.

℞ Similar.

a. 18mm. 8.45 gr. Yakountchikoff, Petrograd; I-*a*. **Plate III, 8**

J. I. N. 1902, 35c.

b. 17mm. 8.36 gr. Paris (de Luynes); II-β. **Plate III, 9**

Brandis, *op. cit.*, p. 410; Six, Num. Chron. 1888, p. 111, No. 16; Babelon, Traité II², No. 2552, pl. clxxi, 19; J. I. N. 1902, 23a, pl. ii, 22.

c. 17mm. 8.42 gr. ———; III-γ.

Cat. Monn. gr. ant., pl. xxix, 791 (Naville et Cie, Geneva, 1922).

d. 17mm. 8.45 gr. London; III-γ. **Plate III, 10**

Wroth, Num. Chron. 1894, p. 10, pl. i, 11; Jour. Hell. Studies, 1897, p. 85, pl. ii, 14; J. I. N. 1902, 23b, pl. ii, 23.

e. 17mm. 8.38 gr. Jameson, Paris (formerly Duruflé); III-γ.[2] **Plate III, 11**

Cat. Jameson, No. 1441, pl. lxxiii (Paris, 1913).

a–e, three different obverse dies—*b* and *c*; *d* and *e*, identical. Three different reverse dies—*c–e*, identical.

[1] The stater, formerly of the Warren Collection, No. 1006 (19mm. 8.43 gr.), has not been seen by the author in cast or photograph, and it is therefore uncertain whether or not this is identical with any of the above thirty examples.

[2] The left background of the obverse die has been cut away to make room for an inscription which appears on the coin in front of the head of Nike. The reverse die also has lightly impressed countermarks below and in front of the Pegasos. The inscription appears to be in Cypriote characters, but seems indecipherable.

31 Head of Herakles, as Omphale, bearded; hair rolled, wearing stephane; behind neck, a club.

℞ Similar.

a. 18mm. 8.37 gr. Boston (Greenwell-Warren); unique. **Plate III, 12**

Greenwell, Num. Chron. 1893, p. 84, pl. vii, 7; Regling, Samm. Warren, No. 1017, pl. xxiii; Babelon, Traité II², no. 2558, pl. clxxii, 2; J. I. N. 1902, 29a, pl. iii, 12.

32 Head of a female Satyr l., hair long, several stray locks over forehead and cheek, with pointed goat's ear; she wears an ivy wreath with bunch of ivy leaves over forehead; ear-ring with single pendant, and necklace.

℞ Similar, but the middle section of r. wing is no longer of "ladder pattern", first seen in Types 13ff., but reverts to style of earlier Types, Nos. 3ff., a narrow feathered section.

a. 18mm. 8.32 gr. London; unique. **Plate III, 13**

Knight, Num. Vet., p. 131 (B), 6; Head, Guide, p. 37, pl. xviii, 18; Head, Hist. Num., p. 530, fig. 282; Six, Num. Chron. 1888, p. 111, No. 18; B. M. C. Mysia, No. 24, pl. xix, 2; Babelon, Traité II², No. 2559, pl clxxii, 13; J. I. N. 1902, 30a, pl. iii, 13.

33 Head of Aktaion, beardless, hair short, curly, with stag's horn.

℞ Similar.

a. 18mm. 8.39 gr. (Formerly Warren); I-*α*.

Cat. Late Collector, No. 326, pl. vii (S. W. & H., London, May, 1900); Regling, Samm. Warren, No. 1019, pl. xxiii; Cat. American Artist and well-known Amateur, pl. ii, 50 (S. W. & H., London); J. I. N. 1902, 33d.

b. 18mm. 8.45 gr. London; I-*β*. **Plate III, 15**

Wroth, Num. Chron. 1893, p. 9, pl. i, 16; Jour. Hell. Studies, 1897, p. 85, pl. ii, 13; J. I. N. 1902, 33a, pl. iii, 18.

c. 20mm. 8.44 gr. Boston (Greenwell-Warren); I-*β*. **Plate III, 16**

Regling, Samm. Warren, No. 1018, pl. xxiii.

d. 18mm. 8.38 gr. (Formerly Pozzi); I-*β*.

Cat. Monn. gr. ant., No. 2230, pl. lxvii (Naville et Cie., Geneva, 1920).

e. 18mm. 8.46 gr. Paris (Old Coll.); II-*γ*. **Plate III, 17**

Babelon, Traité II², No. 2562, pl. clxxii, 6; J. I. N. 1902, 33b, pl. iii, 19.

f. 17mm. 8.45 gr. Jameson, Paris (formerly Duruflé); II-*γ*.[1] **Plate III, 18**

Cat. Jameson, No. 1434, pl. lxxiii (Paris, 1913); Ann. de la Num. franç., XIV, 1890, Procès-Verbeaux, p. 21.

g. 17mm. 8.35 gr. (Formerly Fürst Ch. v. A.); II-*γ*.

Cat. Gr. Münzen, No. 540, pl. xvi (Egger, Vienna, Jan. 1908).

h. 18mm. 8.40 gr. Berlin (Löbbecke); II-*γ*. **Plate III, 14**

[1] This Aktaion stater probably was not from the Avola (near Syracuse) hoard as M. Hoffman conjectured at the meeting of the Soc. Franç. de Num., when M. Duruflé presented the coin before this body, for this type was not mentioned by either of the two collectors who saw the coins in this hoard (see the reports of Löbbecke and Greenwell in the discussion of hoards preceding the Catalogue of Types). It was more probably from the Troad hoard which was found shortly before the Avola hoard.

From the Asia Minor Find. Löbbecke, Zeit. f. Num. 1890, pp. 8, 178, pl. 12; Von Sallet and Regling, Die Antiken Münzen, pl. 33; J. I. N. 1902, 33c, pl. iii, 20.

a–h, two obverse dies — *a-d*; *e-h*, identical; three reverse dies, *b-d*; *e-h*, identical.

34 Head of Hekate l., hair rolled at back and gathered up into a knot on top of the head; she wears laurel wreath, ear-ring with single pendant, and necklace; behind neck, a flaming torch.

℞ Similar.

a. 18mm. 8.40 gr. Boston (Greenwell-Warren); I-*a*. **Plate III, 19**

From the Asia Minor Find. Greenwell, Num. Chron. 1890, p. 26, pl. iii, 13; Regling, Samm. Warren, No. 1012, pl. xxiii; J. I. N. 1902, 20a.

b. 18mm. 8.39 gr. London (formerly Sir H. Weber[1]); I-*a*. **Plate III, 20**

Babelon, Traité II², No. 2549, pl. clxxi, 16; J. I. N. 1902, 20b, pl. ii, 17.

a and *b*, same obverse and reverse dies.

35 Head of Dionysos l., bearded, wearing ivy wreath with bunches of ivy berries over the forehead.

℞ Similar.

a. 17mm. 8.36 gr. Boston (Greenwell-Warren); unique. **Plate III, 21**

Greenwell, Num. Chron. 1893, p. 85, pl. vii, 8; Regling, Samm. Warren, No. 1014, pl. xxiii; J. I. N. 1902, 24b, pl. iii, 2.

36 Youthful head l., beardless, hair short.

℞ Similar.

a. 17mm. 8.40 gr. Paris (Old Coll.); unique. **Plate III, 22**

Sestini, Stateri Antichi, p. 64, No. 11, pl. vi, 9; Mionnet, Sup. V., p. 371, No. 558, pl. lxxv, 3; Brandis, *op. cit.*, p. 410; Six, Num. Chron. 1888, p. 111, No. 20; Babelon, Traité II², No. 2564, pl. clxxii, 8; J. I. N. 1902, 35a, pl. iii, 22.

37 Head of Zeus Ammon, bearded, facing, slightly to l., wearing ram's horns.

℞ Similar.

a. 17mm. 8.30 gr. Paris (de Luynes); unique. **Plate III, 23**

Sestini, Lett. e Diss. IV (Livorno, 1779), p. 69 ("ex. Mus. Ainslie"), and Stateri Antichi, p. 63, No. 6; Millingen, Anc. Coins, p. 69, No. 2, pl. v, 8, "ex. Lord Northwick"; Mionnet, Sup. V, p. 371, No. 557; Cat. Northwick, No. 963 (S. & W., Dec. 1859); Brandis, *op. cit.*, p. 410; Babelon, Traité II², No. 2539, pl. clxxi, 5; J. I. N. 1902, 11a, pl. i, 20.

38 Head of youthful Dionysos, l. with long hair wreathed with ivy, and a bunch of ivy berries over the forehead.[2] Fig. 15.



Fig. 15

[1] The Weber coin is the one figured in J. I. N. 1902, pl. ii, 17, not the example in the Boston Museum, formerly Greenwell-Warren.

[2] This subject is new in the series, although Maenad and Dionysos heads are found in each of the distinctive styles of the coinage. The absence of ear-ring and necklace (what might appear to be a beaded necklace on the truncation of the neck is really the curling end of the front hair),

℞ Similar.

a. 18mm. 8.41 gr. Jameson, Paris; unique.

From the Avierino collection (?), said to have been found in Egypt.

39 Head of the elder Kabeiros l., bearded; wearing laureate pilos.

℞ Similar.

a. 17mm. 8.37 gr. London (Payne-Knight); I-*a*. **Plate III, 24**

Sestini. Lett. e Diss. IV (Livorno, 1779), p. 69, pl. i, 2, and Stateri Antichi, p. 62, No. 4, pl. vi, 3; Mionnet, Sup. V, p. 369, No. 543; Payne-Knight, Nummi Veteres, p. 130, No. 2; Leake, Num. Hell. (As. Gr.), p. 72; Brandis, *op. cit.*, p. 410; Head, Guide, p. 37, pl. xviii, 17, and Hist. Num., p. 530, fig. 280; B. M. C. Mysia, No. 25, pl. xix, 3; J. I. N. 1902, 21c, pl. ii, 20.

b. 20mm. 8.38 gr. Boston (Greenwell-Warren); II-β. **Plate III, 25**

From Asia Minor Find (?), cf. Num. Chron. 1890, p. 26; Regling, Samm. Warren, No. 1016, pl. xxiii; J. I. N. 1902, 21a, pl. ii, 18.

c. 17mm. 8.33 gr. Paris (Waddington); II-γ. **Plate III, 26**

Babelon, Rev. Num. 1897, p. 319, No. 866, pl. vii, 10 = Inv. Wadd., pl. ii, 10, and Traité II², No. 2550, pl. clxxi, 17; J. I. N. 1902, 21b, pl. ii, 19.

d. 19mm. 8.47 gr. New York, Metropolitan Mus. (Ward); II-γ. **Plate III, 27**

From Asia Minor Find (?), cf. Num. Chron. 1890, p. 26; Hill, Cat. Ward, No. 612, pl. xv; J. I. N. 1902, 21d.

e. 18mm. 8.45 gr. London (formerly Sir H. Weber); II-γ. **Plate III, 28**

J. I. N. 1902, 21e.

a–*e*, two different obverse dies—*b*-*e*, identical; and three reverse dies, *c*-*e*, identical.[1]

40 Head of Athena l., wearing crested Athenian helmet ornamented with three olive leaves and scroll, round ear-ring, and necklace.

℞ Similar.

a. 18mm. 8.40 gr. Boston (Greenwell-Warren); unique.[2] **Plate III, 29**

Greenwell, Num. Chron. 1893, p. 85, pl. vii, 9; Regling, Samm. Warren, No. 1009, pl. xxiii; Babelon, Traité II², No. 2542, pl. clxxi, 8; Gardner, Gold Coinage of Asia, Proc. of Brit. Academy, 1908, pl. ii, 10; J. I. N. 1902, 14a, pl. ii, 5.

41 Head of Aphrodite (?) l., wearing wreath of lotus (?), sphendone, and ear-ring with single pendant.

℞ Similar.

a. 17mm. 8.42 gr. London; I-*a*. **Plate III, 30**

Wroth, B. M. C. Mysia, No. 30, pl. xix, 8; J. I. N. 1902, 19c.

b. 18mm. 8.41 gr. Paris (Waddington); I-*a*. **Plate III, 31**

Babelon, Rev. Num. 1897, p. 318, No. 864, pl. vii, 8 = Inv. Wadd., pl. ii, 8; J. I. N. 1902, 19e, pl. ii, 16.

c. 17mm. 8.39 gr. Paris (de Luynes); I-*a*.

Babelon, Traité II², No. 2548, pl. clxxi, 5; J. I. N. 1902, 19d, pl. ii, 15.

and the strength of the features are in favor of considering the head as the youthful and more effeminate Dionysos, rather than a Maenad.

[1] For the obverses, this is certain; the reverses are too indistinct to be certain, but *c*, *d* and *e* appear to be identical.

[2] A second example has recently been seen in the market at Constantinople.

d. 18mm. 8.40 gr. Jameson, Paris; I-β. Plate III, 32

Cat. O'Hagan, No. 536, pl. ix (S. W. & H., London, May, 1908); Cat. Jameson, No. 1445, pl. lxiii (Paris, 1913).

e. 18mm. 8.45 gr. Berlin (Imhoof-Blumer); II-β. Plate III, 33

J. I. N. 1902, 19a, pl. ii, 13.

f. 17mm. 8.41 gr. Boston (Perkins); II-β.

Cat. of Perkins Coll., pl. v, 430; J. I. N. 1902, 19f.

g. 18mm. 8.41 gr. Bement, Philadelphia (formerly Sir H. Weber, London); II-β. Plate III, 34

J. I. N. 1902, 19g; Cat. C. S. Bement Coll., pl. vii, 257 (New York, 1921).

h. 18mm. 8.45 gr. McClean, Cambridge (formerly Greenwell-Warren); II-β. Plate III, 35

From the Asia Minor Find. Greenwell, Num. Chron. 1890, p. 27, pl. iii, 15; Regling, Samm. Warren, No. 1007, pl. xxiii; Cat. Well-Known Amateur (Warren), No. 98, pl. iii (S. W. & H., London, May, 1905); J. I. N. 1902, 19b, pl. ii, 14.

a–h, two different obverse dies, *a-d*, *e-h*, identical; two different reverse dies, *a-c*, *d-h*, identical.

THE DIES AND THEIR SEQUENCE

As remarked above under the description of Type 2, there is only one case of connecting reverse dies between the changing obverses. But as has been shown in discussing the sequence of types, we find reverses so nearly identical that they serve about as well for determining the general sequence of the series as though they were identical. There are a number of unique types and several which are represented by only two examples, and these may as well be mentioned first, and then we may turn our attention to the sequence of examples of the same type where there are more than two examples known. The unique staters are the following: Perseus head, Pl. I, 5; Thetis on dolphin, Pl. I, 8; Persian archer, Pl. I, 9; Nike sacrificing ram, Pl. I, 10; Dionysos head (small size type and flan), Pl. I, 17; Pan head, Pl. I, 21; Herakles head, Pl. I, 29; Athena head facing, Pl. II, 14; Nike erecting trophy, Pl. II, 27; Hera head, Pl. II, 30; head of Herakles as Omphale, Pl. III, 12; head of a female satyr, Pl. III, 13; Dionysos head (large size type and flan), Pl. III, 21; young male head, Pl. III, 22; Zeus Ammon head, Pl. III, 23; head of youthful Dionysos, fig. 15.

Those types of which there are only two examples known are: Herakles and serpents, Pl. I, 1, 2; Helle on ram, Pl. I, 3, 4; Apollo seated, Pl. I, 6, 7; Demeter head r., Pl. I, 15, 16; Apollo head, Pl. I, 27, 28; Demeter head veiled l., Pl. I, 30, 31; Dionysos head (medium size type and flan), Pl. II, 18, 19; Helios head, Pl. II, 20, 21; Ge rising from earth, Pl. II, 25, 26; Lampsake (?) head, Pl. II, 28, 29; Hekate head, Pl. III, 19, 20; Athena head

copied from the Athenian coins, Pl. III, 29.[1] When dealing with types known from two examples only, there is naturally very little ground on which to base inferences as to the order of issue of the different examples. Still in some cases there is a difference in style when the dies are markedly different, which gives us a clue to the order of issue. For example, in the first instance, that of Herakles strangling the serpents, the Paris coin, Pl. I, 2, has the connecting reverse die with the Helle on ram type, Pl. I, 3, and that fact settles the order of the two obverse dies of Type 1. The reverse of the Boston example, Pl. I, 1, has an earlier appearance in itself. The obverses of Helle on the ram (with identical reverse) are very close indeed. On the Berlin coin, Pl. I, 3, Helle is bending over further than on the Paris example, Pl. I, 4. The two examples of Apollo seated are also too similar in style to allow any inference as to their order, and the reverses are nearly identical. The same may be said of the Demeter head r., Pl. I, 15, 16; but the reverse of Pl. I, 16, is closer to that of Type 10, Dionysos head, Pl. I, 17, and hence is placed second. The Apollo heads, Pl. I, 27, 28, are of just slightly different obverse and reverse dies; the Jameson example, Pl. I, 28, may be more developed, and the reverse of the Munich coin, Pl. I, 27, is very closely allied with the preceding Hermes head, Pl. I, 26. The two coins with a Demeter head (veiled), Pl. I, 30, 31, are almost alike on the obverse; the reverse of the Paris coin is close to that of the Herakles head type placed just before it. This latter type (unique) seems to fit well in this position, the wings of the Pegasos having the ladder pattern first developed under the Hermes head type, and the head of Pegasos being larger than on the types placed before it, as it is on those that follow. If the Herakles head is correctly placed in the sequence of types, the Paris example of Demeter veiled belongs just following. The two Dionysos heads, Pl. II, 18, 19, are from the same pair of dies. The reverse die is of individual style, but as the obverse bears a head of medium size, and as the reverse though different, still has a general resemblance to those of the preceding and following types with rather disproportioned head on the Pegasos, and larger wing, the type is placed here. The two Helios head types, Pl. II, 20, 21, are of identical reverse dies, but the obverses seem to be two different dies of which the Jameson coin, Pl. II, 20, seems earlier. The Ge types, Pl. II, 25, 26, are from the same dies; the reverse is peculiar in that the truncation of the Pegasos has the lower corner rounded off. The coins of the Lampsake(?) head type, Pl. II, 28, 29, are from a single pair of dies. The reverse die is crude by comparison with the preceding ones, in that it is too large for the flan, and awkward in design. It seems certainly earlier

[1] The second example was not seen by the writer, and hence cannot be considered here.

than the fine dies of the following Zeus head type. There are other examples of a badly proportioned Pegasos on coins of the Middle period, e.g., Dionysos and Helios types, Pl. II, 18-21. The Hekate head staters, Pl. III, 19, 20, are from the same dies. The obverse is of very fine style resembling closely the Aktaion head, and the reverse has the same declining style that first makes its appearance in the Herakles as Omphale, Pl. III, 12, and following staters, and which according to our chronological scheme, sets in just after the Zeus and Nike types of this same plate.

The types represented by three or more examples afford an opportunity for an arrangement of the different dies in order. In the group of four coins with head of a Satyr facing, Pl. I, 11-14, the last three have a common die. The first coin, Pl. I, 11, has a reverse die which is more like that of the earlier types; compare Pl. I, 10 for example. Hence the obverse die I was probably made before II. The Maenad heads of Type 10, Pl. I, 18-20, are from different obverse dies, but the reverse dies of the second and third examples are identical. As the obverse die of the first coin is much less refined (note the heavy ear-ring and more animal expression of the mouth and eye, and compare the Dionysos type just preceding), and the reverse also is less advanced than those of the other two coins, it may be presumed to be the earliest. Between the other two coins, Nos. 19 and 20 of Pl. I, there is little to choose, except that No. 19 is closer to No. 18. The Hermes head staters, Pl. I, 22-26, are of different obverse dies and their order is determined chiefly by the style of the reverses. The reverses of the first two, Nos. 22, 23 on the plate, are more primitive looking than the following. The reverses of Nos. 24 and 25 are identical. The sequence of style seems very clearly to be in accordance with our arrangement on the plate. Of course No. 23 may have come before No. 22, but No. 26 is surely the latest of the five staters as its reverse is barely distinguishable from that of the following Apollo type, Pl. I, 27. The staters bearing the head of a Maenad with flying locks, rank second in the list of types with most numerous examples of which the Zeus with scepter, Type 29, is the first. These two types, according to the extant specimens, are those of which there were the largest issues; seventeen specimens of the Maenad type and thirty of the Zeus type being known. The obverse dies of the Maenad type number nine, and the reverse dies, ten.[1]

[1] While the reverse dies of the seventeen known specimens number ten, only one more than the total number of obverse dies known, yet an examination of their coupling proves the oft repeated observation that more reverses were needed in striking than obverses, as a general rule. For obverse die II is combined with two reverses α and β; die III with γ and δ. It is true that reverse die δ is found with III, IV, V and VI, but it was not in good condition at any time, having already cracked before being used with III. When it was used in combination with V, the crack was very bad, and a new reverse die ϵ was made to

When we compare the Boston and London examples Pl. I, 32, 33, with the Paris coins Pl. II, 3, 4 (same dies), the line of development is seen to be parallel to that of the Maenad heads of Type 11, Pl. I, 18-20, that is, from a head with more animal character in the expression to a more humanized head. The head on the Paris coins is the finest of all the coins with this head, and is one of the most beautiful Maenad heads on Greek coins. The reverses of these staters have dies very similar to those of the Athena and Maenad heads, placed after them on the plate. The Glasgow specimen, Pl. II, 2, approaches the Paris coins most nearly in the style of both obverse and reverse. The coins intervening between the earliest, Pl. I, 32, and latest, Pl. II, 2-4, all appear to show a line of ascending development which reaches its culmination in the fine style of the coins, Pl. II, 2-4. The Athena head staters Pl. II, 5-8, have different obverse dies, and two reverse dies, Nos. 5 and 6, and Nos. 7 and 8 of Pl. II, identical. Their sequence is probably as here given because of the affinity of the reverse die of Nos. 5 and 6 for that of the latest Maenad head, Pl. II, 4; and that of No. 8 for the die of the Maenad with hair in a saccos, Pl. II, 9, which it greatly resembles. This latter Maenad type appears on dies hard to distinguish from one another.

The order of issue of the three satrapal heads, Pl. II, 15-17, is likewise determined by the reverse dies, for No. 15 has a die of closely similar style to the type of Athena facing, Pl. II, 14, after which it is placed, and the dies of Nos. 16 and 17 are developments of the die of No. 15, and are rather like the die of Nos. 18 and 19 of this plate. Furthermore the first obverse die, No. 15, has more of the typical, and the two following obverses, Nos. 16 and 17, look more like real portraits. The dies of Type 24, Pl. II, 22-24, do not afford any data for placing them satisfactorily in a series. The reverse die β bears a great deal of resemblance to the reverse die of Type 26. Hence it might be the last of the four reverse dies of Type 24. But Type 26, Nike and trophy, might be placed just before Type 24, and 24d be the first of the Zeus heads. The heads themselves are all on about the same level of style, though the coin on Pl. II, 24, may perhaps seem earlier than the others.

The Zeus with scepter, Type 29, Pl. II, 31—Pl. III, 7, has the most numerous examples in the whole coinage — thirty or more; and the order of the various obverse dies which are five in number is not difficult to determine. This arises from the fact that we have among the obverses one die

go with V. The old die δ was, however, used again with a new obverse VI. With VI there were used reverse dies δ, ϵ, ς, ζ, four to one obverse. Thus, although in this small group of coins of the same type, the total number of reverses is not greatly in excess of the total number of obverses, the fact that the reverse dies wore out more quickly is evident.

which is a most perfect die, artistically one of the finest representations of a Zeus head on this scale among Greek coins, and four others which do not approach it in perfection of style. Now, that the evolution of the obverse types is as here arranged, from the most delicately beautiful style of die I in a descending scale to the hard and dry style of die IV,[1] is apparent from the very obviously declining tendency in the development of the reverses. The Pegasos of these Zeus staters has now reached the point of highest artistic and technical perfection, all parts of the body being in harmonious proportion. Note the size of the horse's head, the drawing of the forelegs and the fine rendering of the minute details of the wings of reverse dies α and β. The dies γ—ϵ show a progressive decline of art. There is the same loss of expression and carelessness in details (note the horse's mane) that from now on begins to be apparent in the series at large. Again the difference in style observable in obverse dies I-II as compared with the succeeding dies is of a kind which is clearly due to copying. Note the finesse of the rendering of the lock of hair which falls loose from the occiput of the head in dies I, II, and the less skilful copying of this lock in dies III, IV. Observe also how the back of the hair sags down in dies III, IV, and the less profound expression of the eye.[2]

The dies of the Nike head, Type 30, Pl. III, 8-11, however, do not show any signs of progressive decline due to copying although two of them are distinctly inferior to the third, Pl. III, 10, 11. In this case the evolution of the obverse dies seems to be in an ascending scale up to the remarkably fine die, Pl. III, 10, 11. The other dies seem to be leading up to this one, for there are no details repeated in the manner of the careless copyist. Besides these reasons, there is also the fact that the style of Type 31, Herakles as Omphale, Pl. III, 12, is as close as could be possible to the Nike head of die III. The similar rendering of the turned-up hair and the deep-set eye, and of the hair over the forehead — in short, the whole treatment of the hair—are the points to be noticed. The Pegasos of this Herakles type is of a style which is decidedly inferior to those of the preceding Hera, Zeus and Nike types. From now on the horse is never engraved in the fine style which is characteristic of our middle and early third groups. The "ladder"

[1] We omit from our discussion here die V, the Petrograd specimen, Pl. III, 7, which is peculiar and unlike the other dies; its reverse, too, is also quite different from the other reverse dies.

[2] As in the case of the Maenad head, Type 17, the disparity in the number of obverse and reverse dies is not as great as might be expected. But the coupling of the dies gives the true answer to the question of the relative durability of obverse and reverse dies. For die I was coupled with five reverses α—ϵ, and there are eighteen examples of staters bearing this obverse die — more than half of the known specimens of the Zeus with scepter type, which of course explains why so many reverse dies coupled with I are known. With a sufficiently large number of examples of a given obverse die, there will regularly be found two or more reverses which were used in combination with it.

pattern is dropped altogether after this Herakles type; there is a reversion to the earliest style of our first period; careless striking, and lack of expression in the horse's head are the rule. The obverse dies of the Aktaion head, Pl. III, 14-18, are very similar in character; in fact, they are scarcely to be separated as varying dies, the sole difference lying in the treatment of the eye — the Berlin stater, No. 14, may be the same die as Nos. 17 and 18. If it is die II, as seems probable, though the cast is so poor as to make certainty impossible, then there are two obverse dies, of which the one designated I is the finer. This die seems likely to be the first one cut, from the fact that it is coupled with reverse die *α*, an unquestionably finer die than *β* or *γ*, and probably the earliest, since the difference in style can only be described as a decline.

The Kabeiros head stater, Pl. III, 24-28, has two obverse dies only, and of these, No. 24 is probably earlier; the reverse of this stater is of better style than those of the other coins of this type. The last type, Aphrodite(?) head, Pl. III, 30-35, has but two obverse dies I and II, and reverse dies *α* and *β*. The connecting link which occurs in the middle of the series, No. 32, dies I–*β*, indicates the sequence of the issues as die *β* is most plainly more debased than *α*. It is the last of the series and is vastly inferior to the fine dies of the Zeus and Nike types, and in fact to any of the preceding reverse dies.

CHRONOLOGY OF THE STATERS

The generally accepted date for the beginning of the issue of Lampsakene gold staters is c. 394 B.C. According to style, the staters do undoubtedly begin in the early part of the Fourth Century B.C. and they continue down to the middle or third quarter of this century. The reason for dating the commencement of the issues c. 394 B.C. is that the stater universally admitted to be the earliest type Pl. I, 1, 2, Herakles strangling the serpents, is copied from the type of the so-called Alliance Coinage of Asia Minor which was assigned by Waddington (Rev. Num. 1863, p. 223) to this date. This coinage issued by Rhodos, Ephesos, Knidos, Iasos and Samos bears a common obverse type, the infant Herakles strangling two serpents, accompanied by the inscription ΣΥΝ, the first letters of ΣΥΝΜΑΧΙΑ, *συνμαχία*, "Alliance," and varying reverse badges of the respective mints, Pl. IV, 8, Samos; 9, Ephesos; 10, Knidos. The coins are silver tridrachms of Rhodian weight.

Waddington formulated the interesting theory that the Symmachia was a political alliance made by certain powerful coast towns, Ionian and

Carian, directly after the Athenian general, Konon, had liberated these towns from Spartan control through his naval victory off Knidos, 394 B.C. This league was of an ephemeral nature because in 391, as Xenophon informs us (Hellenica, IV, 8; 17, 22, 23), Ephesos, Samos and Knidos went over again to Sparta. It is not mentioned by ancient historians, but since Waddington wrote, a new member of the supposed anti-Spartan Symmachia has become known through the discovery of the unique tridrachm of Byzantion published by Dr. Regling (Zeit. f. Num. 1905, p. 207f.) This coin, Dr. Regling argues, cannot have been struck before 389 B.C., for Byzantion was until that year still under the oligarchical rule of Sparta, and only when democracy was re-established there, after Thrasyboulos' expedition in 389, would the Alliance type which is clearly emblematic of political liberty, be appropriate.[1] One is forced then to assume that Byzantion came into the confederation five years after its formation in 389 B.C., which would be quite extraordinary in view of the defection of three out of the five original members, Ephesos, Samos and Knidos, which, according to Xenophon, become partisans of Sparta in 391 B.C. The historians Beloch[2] and Meyer[3] have always preferred the date 387 B.C. for the issue of the Alliance coins with ΣΥΝ and the Herakles and serpents type,[4] as they do not accept the theory of an anti-Spartan movement on the part of these towns of Asia Minor as a consequence of the battle of Knidos. This date is the year of the Peace of Antalkidas, when all of the Greek cities, except Klazomenai, were surrendered unconditionally to Artaxerxes II Mnemon, King of Persia. The existence of the coin of Byzantion, at any rate, seems to make Waddington's theory of an anti-Spartan confederation immediately after the battle of Knidos no longer tenable.

Whatever the opinion of historians may ultimately be in regard to the date of the Alliance issues, the Lampsakene stater which borrowed the Alliance type cannot be placed any earlier than 389 B.C. for the reason that it is copied with utmost fidelity of detail from the Byzantian tridrachm. The axis of inclination of the kneeling Herakles, the coils of the serpents, position of the arms, all indicate that the Byzantian coin served as a model

[1] A singular coincidence is the choice of Herakles as infant, strangling serpents, for the reverse of the Libertas Americana Medal, 1791, designed by Benjamin Franklin, to represent the victories of the infant Republic of the United States at Yorktown and Saratoga.

[2] Gr. Gesch., 2nd ed., 1922, III, p. 95. [3] Gesch. des Alterthums, V, p. 308, 310.

[4] Holm, History of Greece, III, ch. iii, note 11, discusses Waddington's theory at length, concluding that the cities of Asia Minor would not be in a position to form a defensive league after the King's peace, and further suggests that if a later date were sought, we might assume the time of the Second Athenian Confederacy, 377, which was anti-Spartan. He was, of course, not cognizant of the Byzantian tridrachm with ΣΥΝ. Bury, History of Greece, p. 553, accepts the date 387 B.C.

for the Lampsakene die-engraver. Moreover, this coin would most naturally be the type which was copied at Lampsakos.

The commencement of the issue of gold staters at this period, c. 387 B.C., rather upsets the theory that the Persian king reserved for himself the right to issue gold coin. This question on which numismatists today are divided is one which is not to be decided by any reference to statements in ancient historians, for we have no evidence of this sort for or against it. M. Babelon (Traité II,[2] Introd.) holds that the Persian kings never interfered in the slightest degree with the issuing of coins by the subject Greek cities. Mr. Gardner maintains the theory that the exclusive right to issue gold was jealously guarded by the Persian kings, and that all gold coinages struck by Greek cities under Persian rule are instances of special privilege. This in the case of Lampsakos seems rather absurd. The Lampsakene gold staters, begun probably around 387 B.C. as we have shown, ought surely to have been suppressed by a monarch jealous of his royal right to issue gold. Lampsakos issued electrum, as did Kyzikos, in the Fifth Century, before Persian control was ended by the struggles at Marathon and Salamis; and similarly in the Fourth Century both of these mints had a coinage in gold (or electrum). There does not seem to be any logic in assuming that the Persian kings would not permit the issue of coinage in electrum or gold by the cities over which they had sovereignty, after the conquest of Lydia in 546 B.C., and then explaining all the instances where such coinage did exist, as, for example, at Chios, Kyzikos, Lampsakos, as exceptions. These mints certainly struck electrum staters between 550 and 500 B.C. Why were they especially privileged? As for gold issues, there are known only the very scanty issues of staters at Ephesos, Rhodos, Klazomenai and Abydos which were all probably earlier than the period of Persian control, 387 B.C.; Abydos struck one type Pl. IV, 23, which appears on one of the earliest Lampsakene staters, Pl. IV, 24, and is probably the prototype of the latter. But in none of the above cases can we prove the existence of a series of issues begun before 387 B.C. and coming to an abrupt end at this date. If this were the case, there would be more ground for the argument that coinage in gold was not permitted by the Persian king.

The Lampsakene stater coinage begins with a type copied from the Alliance silver coins, and this scarcely looks as though there were any lack of freedom in the choice of type. The weight standard, moreover, is identical with that of the Persian darics. Hence we can only conclude that the Lampsakene staters were issued without any interference or hindrance as to the choice of metal, weight or type. As M. Babelon says emphatically, "La lampsacéne était creée pour lutter contre le darique."

THE WEIGHT STANDARD

The recorded weights of the staters here catalogued show that they range from 8.30 to 8.56 grams. The tabulated weights of 132 specimens are as follows:

Grams	Specimens	Grams	Specimens	Grams	Specimens
8.30	3	8.40	17	8.46	4
8.32	2	8.41	15	8.47	3
8.33	2	8.42	17	8.48	1
8.34	1	8.43	12	8.49	1
8.35	2	8.44	7	8.50	3
8.36	2	8.45	19	8.54	1
8.37	7			8.55	1
8.38	6			8.56	1
8.39	5				
Total coins = 30		Total coins = 87		Total coins = 15	Total 132

More than half of the specimens weigh from 8.40 to 8.45 gr.; a little over one-ninth weigh more than 8.45 gr., and a little under one-quarter weigh less than 8.40. As we should expect, there are more coins slightly under weight than there are coins of excessive weight. The norm must be somewhere between 8.40 and 8.45 gr. This is about the same result reached by Dr. Regling in his analysis of the average weight of the daric which he found was c. 8.40 gr.[1] There are forty-nine coins within the range 8.40-8.42 gr. as against thirty-eight within the range 8.43-8.45. The generally accepted norm of 8.415 gr. for the Lampsakene stater whose weight is based on the Persian daric is amply confirmed by this analysis.

These are the staters, which, of pure gold and full Persic weight, were struck around 387 B.C. to compete as a circulating medium with the darics which had already for a century past been the chief stater currency of the ancient world.

Naturally the coinage of an autonomous Greek city, and that too not one of the most prominent, was not very abundant as compared with that of a great nation. Less than one hundred and fifty examples of these beautiful staters have come down to us, and this is a very small number in comparison with the number of darics which have survived from ancient times, as many as three hundred having once been found in a single deposit, near Mt. Athos. Still the inscription relating to the sums contributed by the allies of Boeotia in the Sacred War (see above, p. 2, note 2) helps us to realize that the Lampsakene stater coinage was of considerable importance as a circulating medium, for it mentions sums of five hundred and of eighty-four gold staters of Lampsakos, I. G. VII, 2418, ll. 10, 11, Βυζάντιοι χρυσίω

[1] Klio, 1914, p. 91 f.

Λαμψακανῶ στ[ατεῖρας] ὀγδοείκοντα πέτταρας, ἀργυρίω Ἀτ[τικῶ δρα]χμὰς δεκαέξ "Byzantion (contributed) eighty-four Lampsakene gold staters, sixteen Attic silver drachms"; and ll. 20, 21, Βυσζάντιοι [συνεβάλ]ονθο ἄλλως πεντακατίως στατεῖρα[ς χρυσ]ίως Λαμψακανώς . . . , "Byzantion contributed further five hundred gold staters of Lampsakos."

The date when the Lampsakene staters ceased to be issued is given in the British Museum Catalogue as c. 350 B.C. It is noted, however, in the introduction to this catalogue (p. xxvi) that Six supposed the coinage to have ceased about 330 B.C. This view of Six seems the more probable as the staters would naturally not cease abruptly with the introduction of a new stater coinage, that of Philip II, but only came to a gradual end when Alexander's gold staters had begun to be very abundant in the markets of Asia Minor. Six's reason for suggesting the later date was his interpretation of three of the Lampsakene types as relating to Alexander. The Zeus Ammon head, Pl. III, 23, the Maenad head, Pl. I, 32, and the youthful beardless head, Pl. III, 22, he took as a group struck at the same time in honor of Alexander; Zeus Ammon, as the divine parent claimed by the hero; the Maenad, as Alexander's real mother in the guise of a Maenad, recalling the orgiastic worship in which Olympias was reported to indulge; and the young male head as Alexander himself in the character of the hero Achilles.

Most of these interpretations seem fanciful, for, to begin with, the Maenad type is only one of many Maenad heads that appear on the coinage, and was not issued at the end of the series but rather in the second group, considerably before 350 B.C. The Zeus Ammon type falls into the third and last group of the coinage according to the evidence of its reverse, and the same may be said of the young heroic head. Now this latter is without attributes and cannot be identified as a divine head. There is one other case similar to it in this respect, namely, the female head, Pl. II, 28, 29, which has been called conjecturally, Lampsake, the eponymous heroine of the city. Of her we read in Plutarch and this is a fair conjecture. But there is no name to be found for the young male head. Can it possibly be that the head was intended as a heroic head meant to embody Alexander's likeness? The suggestion which grows out of Six's interpretation does not seem entirely improbable — the head has a somewhat Alexandrine character, and occurring as it does at about the date when Alexander was submissively received by the inhabitants of Lampsakos, it may not be out of the way to regard the choice of the two types, Pl. III, 22 23, as selected out of compliment to Alexander who spared the city when it gracefully submitted to his invasion in 334 B.C.

A retrospective glance at the publication of the various types of staters gives an idea of the frequency with which new specimens and types have come to light. The earliest stater known appears to be the Maenad head (Type 11), Berlin (Fox) example. In 1763-70, two more types, Herakles and serpents, and Lampsake were published, followed in 1782 by the Persian satrap and Maenad with diadem (Type 17) types. In 1817 Sestini was able to list ten types in his Stateri Antichi. Gradually during the last century additions to the types became known, being published one or two at a time. New types appeared occasionally in finds, seven each in the two finds at Avola and in the Troad about 1890. A possible third find reported as occurring near Alexandria in Egypt in 1908 brought to light several staters of types already known. In the J. I. N. 1902, the writer gave a list of thirty-six types, and since then only the Perseus head, the Kneeling Archer and youthful Dionysos types have been made known, bringing the number up to thirty-nine. But as a result of the re-arrangement of the staters in three groups, it becomes clear that the three Dionysos heads which were formerly listed as one type are not merely three different dies employed for a single issue, but are rather three chronologically separate issues belonging respectively to the earlier style, the Weber coin, Pl. I, 17, the intermediate style, the Paris and Jameson coins, Pl. II, 18, 19, and the later style, the Boston coin, Pl. III, 21. These three heads furnish an apt illustration of the same subject treated according to the three variations of style discernible in the coinage. By classifying them as separate types, we gain two more, and arrive at forty-one as our total number.

Of these forty-one types, sixteen are unique. Those types of which the most numerous specimens are known are, the Maenad with flying hair, Type 17, and Zeus with scepter, Type 29; there being seventeen examples of the former, and thirty of the latter here catalogued. It may be chance which has brought down to us so many more of the Zeus with scepter types, but it seems reasonable to infer in this case, and doubtless in the other also, that there were larger issues of these particular types than of the others.

Only two instances of struck forgeries of these staters in gold have come to the writer's attention, the Nike on ram type, Cat. Duruflé, May, 1910, No. 509, an obvious case, and the female Satyr type seen in commerce a number of years ago, of which the obverse flan was concave, and the hair of the head unskilfully executed giving the back hair a sagging appearance.

COMMENT ON THE TYPES

Type 1, Herakles kneeling to the right and strangling two serpents, Pl. IV, 6, 7, was copied from the Alliance coinage of Byzantion, Rhodos, Samos, Pl. IV, 8, Iasos, Knidos, Pl. IV, 10, and Ephesos, Pl. IV, 9, which in turn was borrowed from the coinage of Thebes, Pl. IV, 1-4. The type first occurred on the Theban staters of 446-426 B.C. (British Museum Catalogue, Central Greece, pl. xii, 7) where it appears with other Heraklean subjects, and was used apparently in a symbolical sense as typifying the struggle for freedom from external domination. On later Theban staters and on the pale gold issues of 426-387 B.C.,Pl. IV, 3, 4, the type was again used. On one of the latter pieces, Pl. IV, 4, the infant Herakles is no longer represented as seated and facing, but kneeling (type to r.) as on the Alliance pieces, and wrestling with the serpents in the same fashion as on these latter coins. The hekte of Kyzikos, Pl. IV, 5, may have been an intermediary in the transmission of the type, though not necessarily, as its type is in the facing pose seen in the Theban gold coin, Pl. IV, 3.

Incidentally the study of the Alliance issues of Knidos brings out some interesting points of chronology through the comparison of the heads of Aphrodite Euploia which occur on the reverses. The head of the goddess, distinguished as Euploia by the symbol, a prow, on the Alliance issues, Pl. IV, 10-12, appears to be earlier in style than the same head on the tetradrachm series, Pl. IV, 13, where it occurs as obverse type combined with the lion's head reverse. The tetradrachms, however, are dated earlier in Head's Hist. Num.[2], p. 615, and in the British Museum Catalogue Caria. The prow symbol was not first placed beside the head on the tetradrachm, for it occurs on a drachm, Pl. IV, 14, of the transitional style. The only point against the order here suggested is the fact that the ethnic in full ΚΝΙΔΙΩΝ occurs on the Alliance issues, Pl. IV, 10, whereas on the tetradrachms the short form ΚΝΙ is used. This may have been the determining reason for placing the tetradrachms before the Alliance issues. But there is an example of an Alliance coin with ΚΝΙ, Pl. IV, 11, and the evidence of style is very strong. Knidos, according to Head, adopted the Rhodian weight standard on which the tetradrachms are struck, about 400 B.C., following the example of Rhodos. But under Rhodos, Hist. Num.,[2] p. 638, the arrangement of the issues is at variance with this statement. After the initial silver coinage of 408-404 B.C., is placed the Alliance coinage (of c. 394 B.C., according to the theory). Then there follows the gold stater coinage, and next the tetradrachms of Rhodian weight, 400-333 B.C. This places the introduction of the Rhodian standard

at Rhodos *after* the Alliance issues; or, if the Alliance pieces are regarded as Rhodian tridrachms, as coincident with the Alliance issues. The style, at any rate, of the Knidian tetradrachms seems to give sufficient reason for placing them quite a little later than the Alliance coins. Also, at Ephesos and Samos, the tetradrachms of Rhodian weight, parallel to the Rhodian tetradrachms and bearing magistrates' names in full as at Rhodos, begin after the Alliance issues.

Type 2, Helle on the ram, is a rare subject on Greek coins. The myth of Phrixos and Helle, the children of Athamas who were about to be sacrificed by their father to Zeus Laphystios in pursuance of an oracle, and were rescued by their mother Nephele who sent the ram with the golden fleece, was localized at Lampsakos, as is shown by an imperial coin type with Phrixos and Helle (Zeit. f. Num., VII, p. 25). Athamas was said to have founded Halus in Thessaly whose coins show Phrixos or Helle on the ram.

Type 3, youthful head in a winged helmet, is also unusual. A stater of Kyzikos of early style has a similar subject but there is no resemblance to the Lampsakene type. M. Babelon has called this head "Atys", but from the circumstance that the helmet on one piece seems to have terminated in a griffin's head, now mostly off the flan, the head seems reasonably to be identified as a very youthful Perseus.

Type 4, Orpheus, in Phrygian cap and long garments, seated on a rock in a musing attitude and holding his lyre, was first published by Löbbecke (Zeit. f. Num. 1890, p. 170) and thus designated because of the Phrygian cap which is clearly indicated on the coin. The type is earlier than the type of Apollo seated on the omphalos struck in 346 B.C. by the Amphictyonic Council at Delphi. On the Lampsakene coin, the seat, partly covered by the mantle thrown back, is a rock,[1] not the omphalos, and there is no laurel branch. Orpheus is represented as seated on a rock and playing the lyre on a coin of Traianopolis in Thrace (Head, Hist. Num.[2], p. 288). The musing attitude, however, reminds one of the Delphic stater. Still the Phrygian cap and the absence of any Apolline attributes inclines one to consider the figure as Orpheus rather than Apollo.

Type 5, Thetis on a dolphin, was probably copied from the Kyzikene stater c. 450-400 B.C. of somewhat similar type, Pl. IV, 15, 16. On this latter piece the Nereid or Thetis holds a wreath and shield, while on our stater she holds greaves and a shield. This type was long ago identified as Thetis, the sea-goddess, bearing the arms of her son Achilles. However, on coin types representing Thetis at Larissa Kremaste in Thessaly (Head,

[1] Apollo on a rock with lyre is a Sikyonian type. Head, Hist. Num.[2], p. 410.

Hist. Num.,[2] p. 300) and of Pyrrhus, King of Epirus, (*ibid.*, p. 323), Thetis is riding on a hippocamp. On the former coin, the shield is inscribed $\overline{AX}$ and there is therefore no doubt regarding the interpretation. On our coin, however, the sea-nymph rides a dolphin, and there is no evidence of local cult to support the interpretation as in Thessaly, the home of Achilles.

Type 6, a kneeling archer in Oriental dress, should be compared for pose and action with the kneeling nude Apollo on the stater of Kyzikos, Pl. IV, 17, 18, dating c. 450-400 B.C., of earlier style, as the pose of the bent right leg indicates. On the Lampsakene stater the kneeling position is admirably done although it would be interesting to know just how the artist succeeded with the left foot now off the flan, as the left leg seems stretched almost too far in advance. A similar pose is found on Sikyonian coins, Apollo and Artemis, Pl. IV, 19, 21, and at Orchomenos in Arcadia and Chersonesos, Artemis, Pl. IV, 20, 22. On the silver coins of Sikyon, the figures hold an arrow with the bow in the left hand; and on the Paris specimen of the Kyzikene stater, Apollo holds an arrow also which is not visible on other examples. On the Lampsakene stater the shaft of an arrow is visible above the archer's left hand, held horizontally. Whether Artemis on the bronze coins of Orchomenos and Chersonesos is also holding an arrow in the left is not clear, and some specimens have been described as showing the arrow on the ground which Artemis is about to lift with her right hand. The figures therefore are best described as about to shoot, and not as watching the effect of an arrow which has just been discharged, as with British Museum Catalogue Mysia (p. 26, No. 64, note) on the Kyzikene stater.

Type 7, Nike sacrificing a ram, is a copy of the gold stater of Abydos (British Museum Catalogue Troas, pl. xl) which is slightly earlier, 411-387 B.C., and much inferior in style. The subject is a familiar sculpturesque motive with the bull as the animal of sacrifice.

The facing Satyr's head of Type 8, is probably not connected with the facing Satyr head on gold staters of Pantikapaion as the head is so differently treated on the latter, the neck in profile to the left and the head in three-quarters view.

Type 9, the Demeter head, is an exquisite gem-like piece of work, and may of course equally well be designated as Persephone since a veiled Demeter occurs soon after on the coinage.

Type 10, the head of Dionysos, should be compared with the two later heads, Types, 22, 35 (Pl. II, 18 and III, 21). Its style is quite superior to the rather coarse work of the latest head and to the more formal rendering of the middle type.

Type 11, the Maenad heads, like the Dionysos head just preceding, are

noteworthy for their successful rendering of the animal expression on a human head.

Type 12, the small Pan head and the Hermes head, Type 13, call for no special comment. The latter Pl. IV, 26, is probably copied from the Kyzikene stater, Pl. IV, 25.

Type 14, the Apollo head with fillets is an unusual type. When the Munich specimen, Pl. I, 27, alone was in existence, the head was variously described as Aphrodite (the laurel wreath being supposed to be myrtle, and the fillets, a string of pearls woven in the hair), as Demeter, and sometimes as Apollo. The Boston specimen, Pl. I, 28, makes it clear that the head is not feminine and that it is a bandelette of wool terminating in a triple fringe which is woven in the hair.

The next two types, Herakles in the lion's scalp and Demeter veiled, Types 15 and 16, need not be noted particularly.

Type 17, the Maenad with flying hair, is of great originality and very interesting to study in its artistic development which culminates in the beautiful Paris staters, Pl. II, 3, 4. The heads on all the different dies are full of spirit and expressive of the Maenad in flight.

Type 18, the Athena head, and the facing Athena head of Type 20, are well done though perfectly conventional renderings.

Type 19, Maenad head in a sakkos and wearing a wreath of grapes, is entirely human in expression and it therefore seems most fitting that it should come after the other Maenad heads.

Type 21, the bearded head in a satrapal tiara, was formerly identified as Pharnabazos who struck coins at Kyzikos in 410 B.C., but M. Babelon, following Six, has more persuasively identified the head as that of Orontas, satrap of Mysia and Ionia, c. 362-345 B.C. Bronze coins bearing the name of this satrap,[1] showing a head resembling somewhat the head on the Lampsakene stater, but very small, and silver coins with the name of Orontas and the Lampsakene arms, forepart of Pegasos as reverse type, were struck at Lampsakos. The latter piece[2] has for obverse type a helmeted Athena very like the head on the Lampsakene staters, Pl. II, 5-8. These staters, according to our chronological arrangement, appear to belong to the very same period as the satrapal staters. The date of issue of these interesting portrait staters is, therefore, c. 362 B.C., when Orontas was in revolt against Artaxerxes II Mnemon, king of Persia, on which occasion the other coins of Orontas were struck at Lampsakos.[3]

[1] Babelon, Traité[1], pl. lxxxviii, 19, 20.
[2] B. M. C. Ionia, pl. xxxi, 8.
[3] Babelon, Traité II[2], p. 105 f. Head, Hist. Num.,[2] p. 597.

Type 23, the head of Helios on a radiate disk, is a type which is also found on a silver drachm of Megiste, Pl. IV, 27, 28, an island off Caria, of the Fourth Century B.C. The type is unusual, but of course it is quite certain that the Carian coin is later. The Lampsakene head, moreover, is an improvement on the other piece for the rays begin properly at the rim of the disk.

Type 25, the figure of Ge, rising from the earth, seems likely to have been modelled upon a corresponding figure on a Kyzikene stater, Pl. IV, 29, 30. The pose of Ge, or Gaia, on the Kyzikene stater is the same as on the Lampsakene; her mantle falls over the left arm similarly, and on both staters she bears the same fruits of the earth, corn and grapes though differently disposed. On the Lampsakene coin, the head of the earth goddess is thrown back which accentuates the impression of rising from the ground, as does also the ground line which is uneven and not like an exergual line.

Type 28, the Hera head, is so close to the corresponding Kyzikene head that here again we seem to have a case of copying. In both the above instances the Kyzikene staters are anterior to 400 B.C.

Types 29-32, Zeus with *scepter*, Nike head, Herakles as Omphale and female Satyr, represent the four highest developments of the art of the Lampsakene staters. The symbol behind the Zeus head, Type 29, is not a thunderbolt as it has always been called, but a scepter, the shaft of which is visible below the beard, Pl. II, 34, Pl. III, 4. The seated Zeus on coins of Alexander the Great, and of the kings of Syria and the seated Baal on coins of Cilicia, show this type of scepter which terminates in a lotiform ornament.

The identification of the bearded head wearing a stephane and with a club behind the neck, Type 31, was made by Head. M. Svoronos was formerly inclined to consider it a Pan head, from the appearance of the front locks which resemble upright horns; the symbol behind the head would then have to be a pedum. But the latter looks more like a club and the stephane is unexplained and quite anomalous on a head of Pan. The back hair, too, is turned up in feminine fashion; compare the heads of Hera, Pl. II, 30, of Nike, Pl. III, 10, and of Hekate, Pl. III, 19. The appearance of horns is probably accidental, and Head's brilliant identification stands. Furthermore, the Omphale legend of Herakles, of Lydian origin, according to which Herakles underwent a voluntary servitude, donning female attire as an atonement for homicide, seems to have been localized at Lampsakos since there exists an imperial coin type (Macdonald, Hunter. Cat. pl. xlviii, 5) of Herakles and Omphale, Pl. X, 11.

The Nike head, Type 30, has been called an Eros (J. H. S., 1897, p. 85) on account of the wreath which seems to be certainly of myrtle. The

coin from which the identification was made is the British Museum specimen, Pl. III, 10, but although this die has a somewhat masculine cast, the other dies, Pl. III, 8, 9, would never suggest that the head was anything but feminine.

The head of a female Satyr, Type 32, with pointed ear and ivy wreath is a most beautiful type, and the subject is exceedingly rare. One can hardly call it a Maenad head, for Maenads on the Greek vases and on coins do not have pointed ears. In fact the pointed ear on a female head is most unusual in Greek art. There are a few instances of a Satyresse catalogued in Reinach's Répertoire, but in none of these is it possible to detect the presence of the pointed ear. Several years ago, however, the writer while wandering through the Musée du Louvre in search of some such evidence, was rewarded by the discovery of a Fourth Century female bust in Pentelic



marble, of which the ears are pointed goat's ears (W. Froehner, Sculpture antique du Musée national du Louvre, Paris, 1878, p. 285, No. 286). The nose and the bust associated with this head are restored, but the head

itself is antique.[1] The sculpture is not a perfect parallel to our coin for it is a purely human type, whereas the coin shows an ivy-wreathed and dishevelled female Satyr, characterized as female by the ear-ring and necklace. But the subject is so rare in Greek art that we are fortunate to be able to find it on a marble of the same period as our stater.

Type 33, the head of Aktaion, is also a rare one in Greek art. It, too, occurs on a Kyzikene stater of the period 450-400 B.C. but there is no resemblance of style between the two staters.

Type 38, the young and beardless Dionysos, is of special interest as a fine example of a Fourth Century rendering of the subject. At Maroneia in Thrace, the youthful Dionysos type occurs on coins struck previously to 400 B.C. (Head, Hist. Num.,[2] p. 250), and this is one of the earliest instances of the type on coins. A beautiful head on the coins of Lamia in Thessaly of the period 400-344 B.C. (cf. the coin in the Pozzi Collection, pl. xl, 1205) is very close to our Lampsakene stater in style. The head has the same rather full, soft chin, and the hair and wreath are done in about the same manner, though the gold stater is immeasurably superior to the Lamian piece. At Kyzikos also on staters of the Fourth Century, the ivy-crowned young Dionysos head occurs (Babelon, Traité, pl. clxxiii, 22). The hair, however, is not orderly but dishevelled, and the type seems earlier than the Lampsakene head.

Type 39, the bearded Kabeiros head, is again a copy of a Kyzikene prototype, Pl. IV, 33, 34, the latter dating c. 400-350 B.C. This head was formerly described as Odysseus or Hephaistos on account of the conical pilos which is also worn by Odysseus on the coins of Ithake and by Hephaistos on coins of Methana in Argolis. However, since von Fritze has discussed the cult of the Kabeiroi at Birytis and Kebren in Troas (Zeit. f. Num. xxiv, p. 105 f), and has shown the existence of a young (beardless) Kabeiros and an elder (bearded) Kabeiros at Kyzikos, the present designation has been generally accepted.

Type 40, the Athena head, is copied from the coinage of Athens. An Athenian tetradrachm (British Museum Catalogue Attica, pl. v, 6) which is closest in style to our Lampsakene stater, Pl. IV, 35, 36, dates about 350-300 B.C. The head is done in the pseudo-archaic manner of the Fourth-Century Athenian issues and it at first glance looks most out of place among the other Lampsakene types. It is executed, moreover, in the copyist spirit, and lacks style and beauty altogether.

[1] Froehner, *loc. cit.*, "Satyre Femelle. Buste. Les oreilles de chevre et deux touffes de poil qu'on remarque sur la figure de cette femme la caracterisent comme Satyre femelle (Fauna Satyra): représentation trés rare et trés interessante. (Le nez et le buste sont modernes. La lévre superieure a souffert.) Marble pentélique. Musée Campana. Hauteur totale 0.52."

The head of Type 41 is done in a curiously rough style. It is impossible to say what goddess is here represented, for the wreath which passes over the sakkos and hair is unidentifiable. On the earlier die I, there is a small bud at the base of the flower, but this is not seen on the later die II. Also, on die I, in place of the flower there is a leaf to the right of the ear and on the sakkos, which might pass as a lotus leaf. This leaf is replaced by a flower on the second die. If the wreath is a lotus, the head is doubtless that of Aphrodite who was associated with this plant on coins of Cilicia (Aphrodisias and Nagidos, Head, Hist. Num.,[2] p. 718, 726) and Cyprus (Idalium, *loc. cit.*, p. 739). If the wreath is not a lotus, it is difficult to see what else it may be.

As evidence of cult, the Lampsakene stater types as a whole are not of special value, since they do not represent the chief deities of local prominence as usual. The distinctive badges of this mint are first, the fore-part of Pegasos found on the earliest coins in electrum and silver, and second, the janiform female head found on the silver from 500 B.C. on. The gold staters bear constantly varying obverse types drawn from the whole Greek Pantheon, while the arms of the city occupies the reverse. This is comparable to the choice of types on the electrum issues at Kyzikos where the badge proper is relegated to the position of adjunct symbol, and all sorts of animal and figure types are used for the obverses. Many of these latter are types which are found earlier on other coinages and hence, it may be inferred, were suggested by those coinages, and borrowed, if not precisely copied. At Lampsakos there are cases of obverse types copied directly from other coinages, as already shown, or inspired by them. One would have to eliminate therefore these copied or inspired types in reaching any conclusions as to the principal deities worshipped at Lampsakos.

Of the higher Olympic gods, Zeus and Athena seem to occupy an important position. A Zeus head occurs as two different types, Pl. II, 22, and 31 and in the latter his head is entirely original in the matter of the scepter which is the adjunct symbol. Athena has three types, Pl. II, 5, 14, and Pl. III, 29, the last, however, being an imitated type. Still Athena's head occupies the reverse of the majority of the silver issues Pls. V, VI, and her head is the obverse type chosen by the satrap Orontas for his Lampsakene issues (British Museum Catalogue Ionia, pl. xxxi, 8). Orontas also placed the head of Zeus on one of his Lampsakene coins (Babelon, Perses Achémén. pl. ix, 12). From the above facts it seems fair to infer that these deities were in particular known at Lampsakos. The later bronze coinage, Pl. IX, 19-24, also employs the Zeus type.

Demeter is found on three types, Pl. I, 15, a corn-wreathed head, Pl. I, 30, a wreathed and veiled head, and Pl. II, 25, a figure rising from

the ground, and on a bronze coin, Pl. IX, 35. The figure type seems to have been suggested by the Kyzikene stater, Pl. IV, 29, to be sure, but the triple occurrence of Demeter on the gold coins seems to warrant the conclusion that her cult was prominent at Lampsakos. No other Olympic deities are especially conspicuous on these staters, though Apollo, Hermes and Dionysos are found. Apollo occurs on the Fourth Century silver, Pl. VI, 36-39, and on later bronze, and hence his cult seems probable. The later coinage of Lampsakos, however, discloses what was one of the chief cults of the city, namely, that of Dionysos-Priapos. On the large flat tetradrachms struck after the battle of Magnesia in 190 B.C., Pl. VIII, 1-6, when Lampsakos received its autonomy from Rome, an ivy-crowned and horned head occupies the obverse. On the latest bronze coins this head recurs again, Pl. X, 2-7, and the figure of Priapos is found on Imperial coins, Pl. X, 8, 17, 19. Priapos is an hypostasis of Dionysos, as noted earlier. He wears the wreath of ivy leaves with berries, has ram's horns which betoken his animal nature as a fertility god. This characteristic is most prominent on the Imperial issues.

THE SILVER AND BRONZE COINAGES OF LAMPSAKOS

It was the writer's original plan to issue a separate article on the silver and bronze coinages of Lampsakos thus completing the studies already presented on the Lampsakene electrum and gold staters. Impressions had already been gathered from the collections of London, Paris, Cambridge and Glasgow, and the plates were prepared when word was received from Dr. Gaebler in August, 1922, that he was about to publish a manuscript on the silver coins of Lampsakos left by the late Dr. von Fritze. It was then decided to append the plates to the present article on the gold staters and restrict the text mainly to a brief summary of the chronological order of the issues.

The whole publication was, however, retarded in the autumn of 1922 by the writer's more extended researches in the field of the Alexandrine and Lysimachian issues at Lampsakos, and subsequently by a complete cessation of numismatic work, due to the agreeable but all-absorbing task of serving on the Publication Committee of the Exhibition of American Sculpture held by the National Sculpture Society on the grounds of the Numismatic and the adjoining Museums. Since taking up again the task of completing a much-postponed publication, the paper by Dr. Gaebler on the silver coins has come out in Nomisma, XII, 1923. It is accompanied by two plates which do not duplicate but rather complement Pls. V and VI here given, since so many examples have been drawn by Dr. Gaebler from Berlin, Copenhagen, Brussels and other foreign museums, not included in these plates. The dates assigned to the autonomous silver issues and the arrangement of the same are practically identical in the two articles, but Dr. Gaebler's views as to the dates of certain issues, notably, the second group of the Janiform head series, and the Alexandrine tetradrachms diverge considerably from those that the writer had formed, and in these two viewpoints will be found a fruitful topic for discussion. The writer wishes to express to Dr. Gaebler her appreciation of his kindness in forwarding a copy of his paper so promptly and of his careful review of her paper on the electrum staters (Numismatisches Literatur-Blatt, 1921, No. 216-217, p. 1798).

SILVER

THE HALF-PEGASOS TYPES

c. 510 B.C. or earlier

I. Forepart of Pegasos to l. or r. Rev. Quadripartite incuse square. Pl. V, 1-7.
Denominations: didrachms, tetrobols and diobols.

THE JANIFORM HEAD TYPES

Group A. c. 500-470 B.C.

I. Archaic Janiform female head with round ear-ring, necklace and diadem. Rev. Athena head in Corinthian helmet l. within a square incuse. Pl. V, 8-17.

Denominations: tetrobol Pl. V, 8; drachms, Pl. V, 9-13; obols, Pl. V, 14-16, and tritemorion, Pl. V, 17.

Rev. details: 15, olive wreath on helmet; 16, wheel, countermark on helmet; 17, olive spray in field.

II. Similar head, more advanced style; border of dots. Rev. Similar. Pl. V, 18-27.

Denominations: drachms, Pl. V, 18-23, and obols, Pl. V, 24-27.

Rev. details in lower r. field: 18, olive spray; 19, ϗ; 20, amphora; 22, caduceus; 25, Ξ; 26, ϝ; rev. details on helmet: 18, serpent; 19, 25, 26, olive wreath.

Group B. c. 400-300 B.C.

I. Archaistic Janiform head with round ear-ring and diadem. Rev. ΛΑΜ, ΛΑΜΥ, ΛΑΜΥΑ Athena head in Corinthian helmet r. in circular incuse. Pl. VI, 1-21.

Denominations: tetrobols and diobols (Pl. VI, 1, triobol). Dr. Gaebler publishes also a drachm, Nomisma XII, Pl. II, 1; an obol, Pl. 2; and a tritemorion, Pl. II, 3.

Obv. details: 1, border of dots; 11, dolphin to l. on neck; 12-14, dolphin to r. on neck; 15, ΘΕΟ; 16, ΙΔΟ; 17, 18, ΚΡΙ on neck; 21, later style with drop ear-ring.

Rev. details on helmet: 5, 17, 18, olive wreath; rev. details in field: 9, ivy leaf; 10, serpent; 17, 18, kantharos; 19, fly.

II. Similar head, not archaistic. Rev. ΛΑΜ; helmet usually crested. Pl. VI, 22-32.

Denomination: tetrobols.

Obv. details: 22, pendant ear-ring and necklace.

Rev. details: 23-25, half-Pegasos on helmet; 28-32, serpent on helmet; 31, star in field; 32, grapes in field.

III. Head of Athena in crested Corinthian helmet r. Rev. ΛΑΜ Forepart of Pegasos r.; below, ear of corn. Pl. VI, 33-35.

Denomination: tetrobols.

IV. Apollo head r. Rev. ΛΑΜ Half-Pegasos r. Pl. VI, 36-39.

Denomination: diobols.

Rev. symbols: 36, dolphin; 37, mouse; 38, bee; 39, helmet.

V. Zeus head r. Rev. ΛΑΜ Half-Pegasos r. Pl. VI, 40.

THE HALF-PEGASOS TYPES

The silver coinage of the half-Pegasos types is very scanty and rather difficult of attribution. Two coins in the Paris collection, Traité, pl. xiv, 13 and 17, should not be given to this mint on account of the style of the obverse and reverse. The half-horse of No. 13 of the Traité is very similar to that of coins assigned by Svoronos (L'Hellénisme primitif de la Macédoine, pl. xiv, 16 and 17) to the Crestonians of primitive Paionia, while the incuse squares of both Nos. 13 and 16 of the Traité also resemble the Paionian coins (Svoronos, pl. xiv, 16 and 17.) The small coin No. 15 of the Traité, the same as No. 7 of our Plate V which has three globules around the half-horse, is uncertain, and No. 17 of the Traité, with the Satyr's head in the incuse is certainly not Lampsakene. The London coin, British Museum Catalogue Mysia, pl. xviii, 6, similar to a piece in the Cambridge collection, may not belong to our mint, as the incuse is of a different design.

The other coins of Pl. V from the Paris and London collections, and Pl. V, 1, from the Newell collection are all surely of Lampsakos with the possible exception of Pl. V, 7, as above indicated. They represent three different denominations, the didrachm, Pl. V, 4, 5, the tetrobol, Pl. V, 1-3, and the diobol, Pl. V, 6, of the same standard which was applied to the striking of the contemporary electrum coinage, which is called by Babelon, "Phocaic reduced." Dr. Gaebler separates the half-Pegasos issues into two groups, an earlier, comprising all the smaller denominations which he calls diobols and obols (but which are really tetrobols and diobols),[1] of the local Lampsakene electrum standard, and a later issue, including the larger denomination, the two didrachms, Pl. V, 4, 5 (Gaebler, Group I, No. 10) of which nine examples are known, and a small unique piece in Berlin (Gaebler, Group I, No. 11) which he regards as struck on the Milesian standard, which is the same as that of the electrum staters of Lampsakos with the palmette symbol, the supposed Ionian Revolt staters. These staters have been discussed earlier in this paper, and reasons given for questioning the Ionian Revolt theory. Stylistically, at least, the didrachms appear to the writer as more closely allied to the undoubted electrum staters of Lampsakos, note particularly the stater figured on Pl. I, 11, of the Electrum Coinage.[2] In general there seems to be no cogent reason for assuming

[1] Compare Babelon's table of weights for the Lampsakene electrum standard as applied to silver in the Traité II,[1] p. 343, which is as follows: tetradrachm (electrum stater), 15.36 gr.; didrachm, 7.68 gr.; drachm, 3.84 gr.; tetrobol, 2.65 gr.; diobol, 1.28 gr. There is evidently a miscalculation on Dr. Gaebler's part when he writes (Nomisma XII, p. 4) of a diobol of c. 2.57 and an obol of c. 1.28 gr. The writer fully agrees however with Dr. Gaebler's deduction that this silver coinage follows the same standard as the local Lampsakene electrum "Phocaic reduced," and not the Milesian as given on p. 19 of Electrum Coinage.

[2] A detail, but an important one, is the fact that these didrachms show a rather larger middle section of the near wing of the Pegasos, a characteristic of the regular Lampsakene staters of the archaic period.

a change of monetary standard for the didrachm issues, although it must be admitted that the nine examples known are all under weight — on the theory that they belong to the usual Lampsakene standard. The Lampsakene standard would require a didrachm of 7.68 gr. while the Milesian didrachm would call for one weighing 7.07 gr., both of which weights exceed those of the extant examples (see Gaebler, *loc. cit.*, p. 5) which range from 6.95 to 6.66 gr. But the reason underlying the assumption of a change of standard is entirely bound up with the attribution to Lampsakos of the electrum stater coinage of the palmette class. If the Ionian Revolt theory is proved to be correct, then these didrachms may be the subsidiary silver coinage which goes with the electrum coinage, and the difference in style between these didrachms and the Revolt staters may be accounted for by the hypothesis that the silver pieces were struck in the home mint and the electrum staters issued at the common mint of the League of Ionian cities which joined in the Revolt.

THE JANIFORM HEAD TYPES

Group A. c. 500-470 B.C.

The Janiform head series began to be issued about 500 B.C. The closest parallel to these double heads on which the hair is rendered in rows of dotted lines on the crown and in pearl-like strands falling straight over the forehead is to be found in the Arethusa head on the early tetradrachms of Syracuse (British Museum Catalogue Sicily, p. 146, No. 4; Head, Coinage of Syracuse, pl. i, 3; Babelon, Traité, pl. lxxiv, 7). These latter coins, it is true, are always given to the period 485 B.C. by our chief authorities (British Museum Catalogue Sicily, p. 146; Head, Coinage of Syracuse, p. 7, and Hist. Num.,[2] p. 172; A. Evans, Contributions to Sicilian Numismatics, Num. Chron., 1894, p. 197f; Babelon, Traité II,[1] p. 1519-20).[1] But even a cursory study of the archaic coinage of Syracuse will suffice to throw doubt upon this date long accepted as definitely established. The first objection to it lies in the consideration that there would be far too brief an interval then remaining between these very archaic issues and the Demareteion, c. 479 B.C.,[2] which breaks forever and finally with archaic tradition in the treatment of the hair and eyes. And, in support of this theoretical inference as to the length of time required for the development in style from the archaic tetradrachms of the type shown in British Museum Catalogue Sicily, p. 146, No. 4, to the Demareteion type, there is extant a very abundant series of archaic tetradrachms in numerous varieties illustrating every shade of progress from the early archaic to the transitional style, and these numerous issues constitute the main practical proof of the longer interval which must have intervened. It is impossible to crowd all these different types of heads into the space of some six years. In order to surmount this difficulty, it has been proposed to place these too-abundant issues which are at once felt to be superfluous for the short period to which they have

[1] This universally accepted date is based solely on R. S. Poole's conjecture (published in an article entitled, "On the use of the coins of Camarina, etc.," Transactions of the Royal Society of Literature, X, pt. 3) that the Victory figure was first placed over the quadriga of the obverse type of the earliest Syracusan tetradrachms by Gelon, tyrant of Syracuse, 485-478 B.C. in commemoration of his four-horse chariot victory won at Olympia in 488 B.C.

[2] Evans, *loc. cit.*, assumed 488 B.C., the date of Gelon's Olympic victory, to be the date of issue of the earliest Syracusan coins with the Victory figure, but Gelon was not master of Syracuse until 485 B.C. Hence the interval between the earliest tetradrachms supposedly issued by Gelon and the Demareteion would be only six years instead of ten as stated by Evans (see Holm, Geschichte Siciliens, III, p. 570).

been given, in the period immediately *after* the Demareteion.[1] Not all of our numismatic authorities, however, have adopted Evans' conclusions in their entirety, although Babelon has arranged the archaic Syracusan coinage according to this scheme in his Traité, pls. lxxiv-lxxv, thereby placing even tetradrachms with ϙ in the ethnic *after* 480 B.C.[2] In the British Museum Catalogue Sicily, Head's Coinage of Syracuse and Du Chastel's Syracuse (all written before Evans expressed these views) and in the Jameson Catalogue, a recent work, these archaic tetradrachms are correctly arranged as *preceding* the Demareteion, but the series is always dated as commencing in 485 B.C.

Certain writers, Gardner, Num. Chron., 1876, p. 7, and Headlam, *op. cit.*, 1908, p. 9, have found an additional reason for supporting the Gelonian date by pointing out that the obverses of the early coins of Leontini and Gela bear the same type as that of Syracuse, a quadriga crowned by Nike, and that this can only be accounted for by the assumption that these pieces were issued when the three cities were under the same dynastic control which could only have been under Gelon.

According to Gardner, Gelon introduced the quadriga type on the coins of Leontini and Gela after his victory in 488, and subsequently, after 485, on the coins of Syracuse. Headlam regards the quadriga on the coinages of these three cities as simultaneously introduced after 485 B.C. Either theory calls for a coinage in the three cities about contemporaneous. Without entering too deeply into the intricacies of this question, the writer believes that it can be shown that the quadriga types of both Gela and Syracuse are considerably more ancient than those of Leontini, that it

[1] Evans, *loc. cit.*, p. 199, originated this theory that the tetradrachms which form an overwhelming proportion of the early currency of Syracuse, which, he admits, seem at first sight much more archaic than the Demareteion (Du Chastel, Syracuse, pl. i, 5 f, and pl. ii, 13-22) were a wholesale coinage struck after 480 B.C. from the booty won by the victory of Himera, on such a vast scale that second-rate die-cutters must have been employed, resulting in a "wholesale artistic debasement" of the coinage; so that what at first sight appears more archaic, in this case is simply rude. This argument is a patent case of special pleading to solve what would be undoubtedly a first-class numismatic puzzle, an attempt to date the earliest Victory tetradrachms in 485 B.C. and then to connect the Demareteion as the next issue in sequence, and squeeze all the remaining archaic coinage into the same general period as the Demareteion. It has not been refuted hitherto, so far as the writer is aware, and has been reflected in later writings, as Headlam, Some Notes on Sicilian Coins, Num. Chron., 1908, p. 10 f. This latter article, too, labors under the theory of the Gelonian origin of the Victory type on the obverse. It was only a chance detail, the occurrence of the fine circular line around the Arethusa head of the Demareteion which led Evans to connect the latter so closely with the early tetradrachms on which this circle also occurs, and which Evans correctly derived from the circular inset of the incuse reverse (Head, Coinage of Syracuse, pl. i). The Demareteion artist happened to revive this archaic detail, but of course it does not follow that the Demareteion is an issue consecutive upon the earliest types.

[2] On p. 1533 of the Traité II,[1] Babelon remarks that some of the archaic tetradrachms which he has placed after the Demareteion are anterior to it, but that in general they are almost contemporaneous with it.

would be very difficult to select the coins which Gelon is supposed to have had struck in these cities at about the same time. If, however, a type borrowed from Syracuse had appeared on the coinage of either or both of the other two cities of apparently contemporaneous style in both or all three cases, and of Gelon's period, we might assume this as evidence of Gelonian control which is a matter of historical record for these three mints. Such an example of Gelonian influence may be found in the case of a tetradrachm of Leontini which does bear a peculiarly Syracusan type, the Arethusa head, otherwise foreign to the usual quadriga and lion's head types (Babelon, Traité, pl. lxii, 9; British Museum Catalogue Sicily, No. 9). If now we search in the Syracusan series for the type most nearly corresponding to this coin of Leontini, we shall discover just which coins of Syracuse may properly be regarded as belonging to Gelon's period, for it is the most natural inference in the world to account for the intrusion of a Syracusan coin type at Leontini at this period as due to Gelonian influence. A coin which is generally similar is that shown on Babelon's, pl. lxxv, 12, although it may be somewhat earlier than the tetradrachm of Leontini, as the hair over the forehead is still represented by dotted lines. Somewhat closer is a tetradrachm formerly in the Sandeman Collection, No. 297, with the hair executed in fine wavy lines. The head on both these coins of Syracuse is rather small for the flan, as is the case at Leontini, and, in the sequence of types as worked out by Babelon and others, these Syracusan pieces belong quite well along in the series. Hence, if the whole group of archaic tetradrachms be placed in the period preceding the Demareteion as the writer contends is correct, these types with the small head would be not far antecedent to the Demareteion types. They therefore could easily fall within the period of Gelon, 485-478 B.C. This parallelism helps to strengthen our argument, for it throws back the earliest tetradrachms with the Victory figure, which the writer maintains cannot be Gelon's coinage, to a date at least a decade previous, as a detailed study of the sequence of the abundant archaic issues will demonstrate.

The chariot type alone without the Victory floating above it which occurs on the first Syracusan coins of the period of the landed aristocracy, the Geomori, of the latter Sixth Century must have been selected as an agonistic coin type by the rulers who patronized the sport before the days of Gelon I, and there is no reason why the Victory figure could not have been introduced previous to this tyrant. Anaxilas, tyrant of Rhegium, placed a biga without the Victory figure on his coins to record his Olympic victory with the mule team (Babelon, Traité II,[1] p. 1470, pl. lxxi, 13). That Gelon introduced the Victory figure into the type is in absolute dis-

accord with the numismatic facts, as has been shown, since there would then be on the one hand a period of more than fifteen years between the first issues of Syracuse, quadriga and incuse type, and the supposed Gelonian issues of 485 B.C., with the scantiest possible coinage extant to fill in this gap, while as stated for the interval between 485 B.C. and 479 B.C. when the Demareteion was struck, there would be a superabundance of coins which cannot be condensed into this short period. The conclusion is inevitable that the Victory figure types began about 500-495 B.C. where numismatists, if guided only by style, would naturally have placed them.[1]

The writer has dealt elsewhere (Electrum Coinage, p. 22) with Babelon's theory that the Janiform head types commenced to be struck at Lampsakos during the period 513-511 B.C. at about which time the same type makes its appearance on a trihemiobol of Athens (Babelon, Traité II[1], p. 151f). This theory that an alliance between Hippias, tyrant of Athens and Hippoklos, tyrant of Lampsakos,[2] is indicated by the contemporaneous issue of coins with a similar type, supposedly borrowed by Athens from Lampsakos, is upset by the fact that at Lampsakos there is no coinage with the Janiform head type as archaic in style as that of the Athenian piece bearing this head, and that the Lampsakene silver coinage of this period is the half-Pegasos coinage (Pl. V, 1-7) which was struck as the "small change" of the electrum stater issues.

Turning now to the Janiform head types of more developed style, Pl. V, 18-27, there is shown a marked relaxation from the strict severity of the earlier coins, Pl. V, 8-17 which we have just dated in the decade 500-490 B.C. The coins on Pl. V, 18-19, exhibit the same stage of development as the Athenian tetradrachms of the style following immediately upon that of the dekadrachms (British Museum Catalogue Attica, pl. iii, Class a). The expression of the head (or heads) is milder, the front hair is rendered by wavy bands that suggest the Athenian coinage. Unfortunately we have to wrestle here again with the dating problem as our authorities are at variance as to the date of issue of the dekadrachms. Dr. Gaebler (Nomisma VII, p. 10) uses the coins of Athens as a term of comparison for these issues of Lampsakos, and the writer entirely concurs with his view of the parallelism in style between the Lampsakene issues of more advanced style Pl. V, 18-19, and the archaic Athenian tetradrachms of the usual type with the olive leaves and palmette or scroll device on

[1] Note Babelon's independent dating of the non-Victory figure coinage as *before* 500 B.C., while all other authorities have dated the coinage as starting in 500 B.C.

[2] P. N. Ure, The Origin of Tyranny, p. 63, note 7, cites this theory as numismatic evidence of Hippias' personal ties with the tyrant of Lampsakos. Under *b* his note should be amended to read "Athens, *obv.* type of Lampsakos, *rev.* Athena head."

the helmet issued just after the dekadrachms. But his argument that the Athenian dekadrachms were not struck before 480 B.C. is a view with which we do not agree. The dekadrachms are of such strong archaic style that it would seem incongruous to associate them with the Syracusan dekadrachms, the Demareteia, for which we have a positive date founded on historical evidence. Dr. Gaebler points out forcibly the strong evidence afforded by a group of archaic Athenian tetradrachms, none of which are published in the British Museum Catalogue nor in Babelon's Traité (Gaebler, *op. cit.*, pl. i, 34-37; Svoronos, Trésor des Monnaies d'Athènes, pl. 8, 1-6) which antedate the dekadrachms of Athens, as the dotted hair over the forehead, the more primitive eye and profile convincingly prove, and which nevertheless show the olive leaves on the helmet. If this latter decoration contains a reference to the victory at Marathon, as has generally been thought in regard to the dekadrachms, then these very rare early tetradrachms of Athens were struck soon after the victory of 490 B.C. Dr. Gaebler concludes that since the battle of Marathon is commemorated by these tetradrachms, the dekadrachms which are certainly of later style must have been struck to commemorate Salamis. Of course it is only an inference that the olive leaves were placed on Athena's helmet to commemorate one or the other of the two great victories. The olive is not the laurel of victory, and is part of Athena's personal symbolism like the owl and olive which had previously been on the coins. Still, of course, the change or rather modification of type would seem to require an explanation in terms of an historical event. But granted that the battle of Marathon is celebrated by the early tetradrachms with the olive leaves which we may assume to represent a wreath of victory, there would then be a gap of ten years between these early tetradrachms and the dekadrachms for which there are no coins at all during a period which is elsewhere as at Syracuse, characterized by abundant coinage showing a steady progression from archaic to transitional style.

In support of the date 490 B.C. as opposed to 480 B.C., the find of 100 tetradrachms of Athens, said to be "of the early style" in company with 300 darics in the canal of Mt. Athos, supposed to have been deposited by Xerxes at the time of his invasion of Greece (Gardner, History of Ancient Coinage, p. 162; Gaebler, *op. cit.*, p. 10, note 3), has been invoked. It is pointed out that in this find there was at least one Athenian tetradrachm with the olive leaves on the helmet, and this fact has been regarded as lending support to the date 490 B.C.[1] But this coin is a late tetradrachm of the "Athenian imitation" style, probably a Fourth Century Indian imita-

[1] Babelon, Traité II[1], p. 766.

tion as would plainly appear from the drawing of the coin in Beulé's Monnaies d'Athènes, p. 44, as well as from Beulé's description of the piece on p. 71. What the other tetradrachms looked like is not known, but there is no reason whatever not to infer that they were coins of the ordinary "olive wreath" type (British Museum Catalogue Attica, pl. iii, 2 f), since the phrase describing them as "of the early style," while vague, pretty certainly indicates this well-known type. But the one coin upon which so many writers base their proof is of no value at all, since, as Beulé showed, it could not possibly have been in the hoard. So also the debate over the presence of one tetradrachm of the "olive wreath" type in the Akropolis hoard of 1886, supposed to have been buried about 480 B.C., a coin which has been both refused and claimed as rightfully belonging to the original hoard, is of no significance, though Svoronos, a champion of the date 480 B.C. for the first appearance of the olive on the helmet, has stated that the coin showed no traces of fire as did the remainder of the hoard, and hence probably did not belong to it. According to our dating, such a type might perfectly well have figured in the hoard, for it seems inconceivable that Athens should be issuing coins genuinely archaic in style, like the dekadrachms and succeeding tetradrachms *after* 480 B.C., thus lagging so far behind Syracuse, and that there should be the long interval between the coins of Marathon and those of Salamis, a ten year period for which there is no coinage.

The dekadrachms are of course most reasonably brought into connection with a great victory, and if this, according to our thinking, is rather the Marathonian than the Salaminian, the early tetradrachms bearing the olive and sometimes the scroll, which are noticeably more archaic than the dekadrachms, may have no reference whatever to Marathon.

The archaic Janiform types at Lampsakos are therefore to be dated as follows: Coins of Severe Archaic Style, Pl. V, 8-17, 500-490 B.C.; coins of Strong Archaic Style, Pl. V, 18, 19, c. 490 B.C.; coins of Modified Archaic Style, Pl. V, 20-27, later than 490 B.C. — possibly as late as 470.

THE JANIFORM HEAD TYPES

Group B. 400-330 B.C.

The coins of the class shown on Pl. VI, 1-32, *obv.* Janiform head, *rev.* Athena head in Corinthian helmet, are dated by Head, Babelon and Wroth (British Museum Catalogue Mysia) in the Fourth Century, 394-330 B.C. Dr. Gaebler, however, would assign the beginning of this series to the first half of the Fifth Century. Starting with the premise that the silver coins

on which the old chief badge of Lampsakos, the winged half-horse is introduced anew, Pl. VI, 33-35, must be later than the gold stater coinage, c. 387 B.C., whose reverses bear the ancient city-arms of the electrum coinage as a constant reverse device, Dr. Gaebler assumes that the Janiform head — Athena series, Pl. VI, 1-32 ended in 387 B.C. He then works backward over the group, Pl. VI, 1-32, and taking political events into consideration arrives at the date 470 for the commencement of the Janiform head — Athena group (Gaebler's Group III). This chronological scheme would place our coins, Pl. VI, 1-3, in the period 464 B.C., date of Themistocles' overlordship of the city which Dr. Gaebler indicates was merely nominal, the city having actually entered the Delian League at that date, passing thus from Persian to Athenian possession. The coins which are then assigned to a still earlier date than 464 are three rare pieces not here represented (Gaebler, pl. ii, 1-3) which are given to 470-464 B.C. They bear no ethnic on the reverse, and are stylistically the forerunners of the series[1] shown on our Pl. VI.

The implied inference in Dr. Gaebler's chronological scheme is that once the half-horse badge became the regular city emblem again on the gold coinage, c. 387 B.C. (but considerably later on the silver, Pl. VI, 33-35), the Janiform head-Athena types were discontinued. In support of this, he points to a single coin, Athena head with *Attic* helmet and half-Pegasos types (*op. cit.*, Pl. ii, 35) of fine Fourth-Century style, comparable to that of the gold staters before 350 B.C., which may with probability be referred to the years, 365-355 B.C. This coin does not bear any inscription, but its Lampsakene reverse indicates its connection with our mint. It appears nevertheless to belong with the other satrapal silver and bronze coins of Orontas, satrap of Mysia, 362 B.C. It has no affinity whatsoever with the Athena head—half-Pegasos coins, Pl. VI, 33-35, which are much later in style. These latter pieces, as we hope to show, were not struck until after 330 B.C. Dr. Gaebler places them as late as 300 B.C. On Dr. Gaebler's showing there would be but scanty silver issues from the Lampsakene mint during the period when the gold staters were issued, only the Athena head triobol struck under Orontas, just mentioned. But does the style of the coins shown on Pl. VI, 1-32, warrant our placing them all before 387 B.C. and the earliest before the middle of the Fifth Century?

The Janiform heads on the coins, Pl. VI, 1-21, are consciously archaistic in the retention of the archaic style of treatment of the hair, but the Athena heads were surely executed in the period of advanced art of the Fourth Century. The most obvious types with which to compare these reverses are the Athena heads on the coins of Corinth and the result of this collocation is to demonstrate that the Lampsakene coins, in spite of the deliberate

[1] See further the Addendum on p. 77.

archaism of their obverses, are really most closely akin to the Corinthian staters of the period, 400-338 B.C. The style of the Athena heads of the coins figured on Pl. VI, 1 f. would seem to make it impossible to place the beginning of our series as early as 460 B.C., the date of the severe early fine style represented by the Corinthian coins shown in Oman's paper on the Fifth-Century Coins of Corinth (Corolla Numismatica, pl. xi, 2, 3). Furthermore, the later issues of the Janiform head—Athena group on which the helmet of Athena is crested and bears various symbols, chiefly the coiled serpent, Pl. VI, 28-32, which Dr. Gaebler places between 405 and 387 B.C., seem to the writer most palpably later than 387 B.C. They are not so very far removed from the coins on which the helmeted Athena head becomes the obverse type. Now, the type of crest which appears on these latter coins with Athena-head obverse and half-Pegasos reverse, Pl. VI, 33-35, is that characteristic of the staters of Alexander the Great. We note that a similar comparison has been made by Dr. Lederer in his paper, Ein Goldstater Alexanders des Grossen (Zeit. f. Num., xxxiii, Sonderabdruck. Nachträge.), "Der Athenakopf dieser letzteren Münzen scheint mir aber dem Stile nach bereits der Zeit Alexanders des Grossen anzugehören und von seinen Goldstateren beeinflusst, wie so manche Münzen anderer griechischen Städte." The particular pieces to which Dr. Lederer here refers, Pl. VI, 28-32, may perhaps be influenced by the type of Alexander's gold staters, but it seems extremely probable that the peculiarly Alexandrine type of helmet on the coins immediately following, Pl. VI, 33-35, was imitated from the staters of Alexander. The Apollo heads, Pl. VI, 36-39, are very likely to have been suggested by the small gold and silver coins of Philip II, 359-336 B.C., as Dr. Gaebler suggests (*op. cit.*, p. 28), and antedate the issues shown on Pl. VI, 33-35.

Adramytion and Iolla in Mysia issued bronze coins with a reverse type, forepart of Pegasos, beneath which an ear of corn to the right (Antike Münzen Mysiens, pl. i, 1, and pl. x, 12-14). These are dated by von Fritze about the middle of the Fourth Century, and this type has apparently been copied at Lampsakos on the Athena–head-half-Pegasos coins, Pl. VI, 33-35, which we should be inclined to date towards the end of the Fourth Century. Dr. Gaebler dates these pieces about 300 B.C. at the earliest, and since, as he points out, they are over-struck on flans of the preceding Janiform head types, it would seem most reasonable to connect them with the earlier series rather closely; although the style of both obverse and reverse is decidedly inferior to that of the latest examples of the Janiform head group. This is all the more reason why the Janiform head–Athena types should not be considered as ceasing in 387 B.C., but should be brought well down below that date. Dr. Gaebler while placing the types with obverse,

Athena head in Corinthian helmet, about 300 B.C., regards the Apollo head coinage as earlier. Both types he considers, as does the writer, to be influenced by the types of Alexander's and Philip's coins. The half-Pegasi of the Apollo head coins are unquestionably better in style than those of the Athena head coins, and they are consequently considerably earlier than the latter.

In conclusion, then, on grounds of style, only a few of the Janiform-Athena head coins of the new style can be dated in the Fifth Century, and the mint of Lampsakos must be assumed to have been almost quiescent during the period c. 470-400 B.C. On the other hand, the Fourth Century witnessed a fairly abundant and continuous series of issues with native types down to about 330 B.C., the approximate date of the introduction of Alexandrine coinage at Lampsakos. The Athena head coins, Pl. VI, 33-35, were doubtless struck after the Alexandrine types had been introduced.

ALEXANDRINE COINAGE

First Series, c. 330-302 B.C.

Staters, tetradrachms and drachms

The Lampsakene gold stater coinage had ceased at about 330 B.C., and most of the silver issues, as we have seen, came to an end at the same time.[1] When Alexander crossed the Hellespont in 334, Lampsakos was spared from destruction through the personal intervention of Anaximenes, one of her citizens, who persuaded Alexander to be merciful (Droysen, Hist. de l'hellénisme, I, p. 139). Shortly after 330 B.C. Lampsakos began the issue of staters, tetradrachms and drachms of Alexandrine types.[2] Many of these coins lack the half-Pegasos mint-mark, but have been attributed to Lampsakos on other grounds.[3] Only coins of later date, Müller's Class VI, of the style of his Nos. 915-917, bearing the Lampsakene mint-mark, will be here treated in detail. When the half-horse is employed on the drachms of the earlier Fourth Century staters, it would seem to be a specially chosen

[1] Exceptional silver issues of much later date are the coins figured on Pl. IX, 32, 33, which are discussed below with the bronze coinage.

[2] Dr. Gaebler (*op. cit.*, p. 29) has attributed a selection of staters and drachms bearing the half-Pegasos symbol from the list of Müller (Num. d'Alexandre le Grand, Nos. 602-619, Incerti Macedoniae, etc.) to Lampsakos in the Fourth Century. Müller's Nos. 912-913, drachms with the monograms ⋈ and ⋈ which Müller placed in his Class VI, belong among the earlier issues. Müller had already suggested that Nos. 615-619 might probably belong to Lampsakos (Num. d'Alexandre, p. 196 and 235).

[3] In Numismatic Notes and Monographs, No. 21, Alexander Hoards II, Demanhur, Mr. E. T. Newell has attributed tetradrachms to Lampsakos. He has also assigned a large number of other Alexandrine issues to this mint during the Fourth Century, though this material has not yet been published by him. Mr. Newell has most generously placed this material at the writer's disposal, and the brief sketch of the Fourth Century issues here given owes much to his assistance.

emblem of a particular moneyer rather than a true mint-mark. For it is



Fig. 16

found only occasionally, and is not universally used on this series. In fig. 16, there is shown a drachm of the type of Müller, No. 913 (Num. d' Alexandre) bearing the half-Pegasos, and the monogram ΑΛ under the throne. This monogram has been interpreted by Müller (*op. cit.*, p. 235) as containing the initial letters of the ethnic ΛΑΜ. But since this is found also in the variant Μ, and since it alternates with other Greek letters and symbols on the reverses of the drachms, it probably should be regarded as a private mark. These drachms were struck about 330-302 B.C., and are considerably earlier in style than the Alexandrine coinage consisting of gold staters and silver tetradrachms which regularly bear the mint-mark of the city, which will be discussed below. From about 330 B.C. to 302 B.C., when Lysimachos gained control of the city, Lampsakos probably continued to issue Alexandrine coinage more or less uninterruptedly. This coinage was a regal coinage begun by Alexander and continued after his death.

ALEXANDRINE COINAGE OF LYSIMACHOS

302-281 B.C.

Staters and drachms

Lysimachos at first struck drachms at Lampsakos with the types and name of Alexander, bearing his own personal emblem, the fore-part of a lion beneath the half-Pegasos, Pl. VII, 1,(ΓΟΡ, under the throne, Rome, Museo delle Terme). This issue would most naturally be placed in the early period of his tenure of Lampsakos, perhaps in 302 B.C., when he first gained the city (Niese, Geschichte der Griechischen und Makedonischen Staaten, I, p. 342) or after the battle of Ipsos in 301 B.C. when Lampsakos was definitely alloted to Lysimachos (*ibid.*, p. 352). The name of Alexander still continues to be used on this drachm although Lysimachos had adopted the royal title some years previously, i.e., 306 B.C. Drachms of Alexandrine types but with ΒΑΣΙΛΕΩΣ ΛΥΣΙΜΑΧΟΥ and the badge of Lampsakos together with Lysimachos' own personal badge, Pl. VII, 2 (Müller, Die Münzen des Königs Lysimachus, No. 24) have the symbol, a torch, beneath the throne, and the inscription ΛΥΣΙΜΑΧΟΥ below and upside down (r. to l.). A stater in the British Museum, Pl. VII, 3, bearing the mint-mark

of Lampsakos, the half-lion symbol of Lysimachos, and the subsidiary symbol, torch, belongs with this drachm. Certain drachms with the half-lion symbol and the inscription ΛΥΣΙΜΑΧΟΥ similarly arranged, below and upside down, but without the Lampsakene emblem seem also to belong here (Amer. Num. Society, with monogram ⍓ above the half-lion; Newell Collection, with dolphin in similar position=Müller, No. 25). A drachm of the Warren Collection (Regling, Sammlung Warren, 511=Müller, No. 23) is like the coin here shown, Pl. VII, 2, but lacks the torch beneath the throne. This torch symbol which is a third adjunct symbol on an Alexandrine tetradrachm surely of Lampsakos, Pl. VII, 8, and the peculiar placing of the inscription make it probable that the drachms cited above which *lack* the mint-symbol are nevertheless Lampsakene. If the drachm with monogram ⍓ above the half-lion, cited above (Amer. Num. Soc.) belongs to our mint, so may also a gold stater of Lysimachos with these two adjunct signs (Newell Collection). All of the drachms with the name of Lysimachos appear somewhat later than the one struck in Alexander's name. The above drachms and the gold stater are the only coins which we can at present assign to Lampsakos under Lysimachos. A tetradrachm bearing Lysimachian types, horned Alexander head and seated Athena, appears to have the fore-part of a winged animal in the left field, Pl. VIII, 7 (British Museum) but the symbol is partly off the flan, and quite uncertain, and the far wing of Pegasos which is regularly visible on the true Lampsakene half-Pegasos is here lacking. Moreover, the obverse is from the same die as a tetradrachm belonging to a long series of Lysimachian tetradrachms bearing the same monogram as seen on our reverse, which were probably issued at Lysimachia in Thrace. There is therefore no evidence of any tetradrachm coinage of Lysimachos at Lampsakos bearing Lysimachos' own types.[1]

ALEXANDRINE COINAGE

Second Series, 280-250 B.C.

Staters and tetradrachms, municipal issues

After the death of Lysimachos in 281 B.C., Antiochos I (281-261 B.C.) ruled the whole coast of Asia Minor, with the exception of the Pergamene kingdom, from Kyzikos to Miletos (Niese, *loc. cit.*, II, p. 85), and also Troas and the Hellespontine region. There is a tetradrachm of Antiochos

[1] In the catalogue, Die Münzensammlung des Stiftes Schotten in Wien, 1920, a tetradrachm of Lysimachian types, p. 164, No. 1803, having the forepart of Pegasos in the exergue is attributed to Lampsakos. We cannot judge without seeing a reproduction of the coin, but the Lampsakene symbol does not appear in the exergue on other types of Lysimachos or Alexander from our mint.

II, 261-246 B.C., or Antiochos Hierax (not Antiochos I, as Müller wrote, Die Münzen des Königs Lysimachus, p. 16, note 26) which has been cited as bearing the mint-mark of Lampsakos, Pl. VIII, 8 (Babelon, Rois de Syrie, No. 197). This tetradrachm however, has as principal symbol in the left field, a long burning torch which is usually interpreted as the mint-mark of Kyzikos, to which Babelon assigns the coin (Rois de Syrie, p. 27, and p. lvi; on p. lvi Babelon mentions the half-Pegasos of Lampsakos as occurring as a mint-symbol of this city on the coinage of Antiochos II but the coin shown on Pl. VIII, 8, is the only one known to the writer which bears the half-Pegasos). But as this would constitute the only case of the occurrence of the mint-mark of Lampsakos on the coins of the Seleucid Kings, it would be very dubious evidence of the issue of Seleucid tetradrachms at our mint.

There can be little doubt, however, that Lampsakos was subject to the early Seleucid rulers, for in 240 B.C., as the result of the struggle between Seleukos II (246-226 B.C.) and Antiochos Hierax, Lampsakos was obliged to seek the protection which Seleukos II alone could not provide from Attalos I of Pergamon (241-197 B.C.) and afterwards remained faithful to this king (Niese, *loc. cit.*, II, 158 and 391). Subsequently when Attalos died in 197 B.C., Antiochos III demanded the return of Lampsakos to a condition of dependence and subjection to tribute as previously under Seleucid rule (Niese, *loc. cit.*, II, p. 642). But Lampsakos resisted and won her independence finally by the help of the Romans after the battle of Magnesia, 190 B.C. (Niese, *loc. cit.*, p. 669, 680, 690 and 739). The status of Lampsakos under the Seleucid monarchs up to the time of Attalos I, seems to have varied considerably. At all events, as we hope to be able to prove, Lampsakos issued a local Alexandrine coinage during the first half of the Third Century.

Müller mentions three tetradrachms of Alexandrine types bearing the mint mark of Lampsakos, Nos. 915-917, which are here represented as follows: Pl. VII, 9 and 10 with Κ beneath the throne=M. 917 (British Museum and Dr. W. Giesecke Coll. from the same pair of dies); Pl. VII, 11, with Α beneath the throne=M. 915 (Paris Coll.); Pl. VII, 13, with ΔΚ beneath the throne=M. 916 (P. Saroglos, Athens). All of these tetradrachms have the same monogram ΣΣ above the half-Pegasos, with a variation of ΣΣ in the tetradrachm signed Α under the throne. This same monogram or its variation occurs also on the gold staters here figured, Pl. VII, 4-6. From the position of this monogram on the coins, and its occurrence on gold and silver alike, we may designate it the primary monogram. Two of the gold staters, Pl. VII, 5, 6 bearing the primary monogram — ΣΣ, bear secondary monograms, Κ and ΑΑ, similar to those found on the tetra-

drachms, Pl. VII, 9-11. Again, a gold stater, Pl. VII, 4, and a silver tetradrachm, Pl. VII, 8, having the same primary monogram and the half-Pegasos, bear the same secondary symbol, a torch, which has already been found on the Alexandrine coinage of Lysimachos, Pl. VII, 2.

The three gold staters here shown, Pl. VII, 4-6, are the only known issues in gold of the mint of Lampsakos during this period. They are all from the Anadol hoard (q.v. below). As far as we can judge from the account written in Russian[1] of this hoard, there were perhaps eight examples in the find, and there may have been more varieties than we are able to show here. The majority and perhaps all of the tetradrachms here published have not hitherto been figured. Four of these are varieties not described by Müller: Pl. VII, 7, 8, 12, 14. Pl. VII, 11, is from the British Museum, and has another variety of the primary monogram or symbol. Pl. VII, 8, is from Mr. Newell's collection with secondary symbol, torch; Pl. VII, 12, is from the Museo delle Terme, Rome, with secondary letter A beneath the throne; Pl. VII, 14, is a coin from Mr. Newell's collection, *without* the primary monogram, bearing a thyrsos and a new monogram ⋿, both above the mint symbol. The tetradrachms, Pl. VII, 8-12, bear the primary monogram, and are of closely similar style. No. 7 is somewhat earlier than this group. Nos. 13 and 14 are closer in style to the central group than No. 7, but just a degree later.

It would appear then that the above staters and tetradrachms, all of which, except No. 14 of Pl. VII, bear the same primary monogram ⋿ or its variants, are about contemporaneous, and we are able to assign them to the first half of the Third Century B.C. from the evidence of the Anadol hoard in which these staters were found. This hoard (E. Pridik, Bulletin de la Com. Impér. Arch., 1920) was composed of gold staters of an unknown total of which 979 were received at the Hermitage, Petrograd. Of this number there were 11 staters of Philip II, 694 staters of Alexander, 21 of Philip III, 250 of Lysimachos, 2 of Demetrios Poliorketes, and 1 of Seleukos I. Since the latest coins in the hoard are the stater of Seleukos I, 306-281 B.C., and those of Demetrios, 306-283 B.C., and the staters of Lysimachos (royal coinage), 306-281 B.C., the date of burial could not have been earlier than 306 B.C. But our concern is to try to ascertain the latest date at which the hoard could have been deposited. Now, as the staters of Lysimachos (306-281 B.C.) to judge from the plates, were all in mint state, the hoard can scarcely have been deposited so very many years *later* than 281 B.C.

[1] A brief abstract in English of the account of the Anadol hoard was made for Mr. Newell to whom the writer is indebted for free access to his collection of Alexandrine issues of Lampsakos.

unless a more intensive study of Lysimachus' coins should prove that some of the Lysimachian staters in this hoard are posthumous issues. A more careful study of this hoard from this point of view with access to the coins themselves would doubtless yield a more exact date. Therefore, the staters shown on Pl. VII, 4-6 (Pridik, *op. cit.*, pl. x, 420 and 426) would have to be assigned to a period ranging from c. 280 B.C. to 250 B.C., the very latest date to which we should be inclined to bring down the possible burial of the hoard. The tetradrachms which, as we have shown, bear similar monograms, and are closely united *inter se* by stylistic similarity, should consequently be given to the same period.

The period to which Dr. Gaebler (*op. cit.*, p. 32) assigns the Alexandrine tetradrachms noted by Müller (*loc. cit.*, Nos. 915-917) is 190-175 B.C., when he assumes that Lampsakos, now a completely free and autonomous state after the defeat of Antiochos at Magnesia in 190 B.C. began to celebrate her freedom by the issue of silver coins of large denomination. But, while it is true that the Battle of Magnesia marks an epoch in the political history of Asia Minor which finds its numismatic expression in the revival of the long popular coin types of the Alexandrine tetradrachms issued by the newly freed cities of Ionia (British Museum Catalogue Ionia, p. xlviii), and also probably of northern Asia Minor, these Second Century issues are no stylistic parallel for the Lampsakene Alexanders. One need only compare the coins illustrated by Head in Coins of the Ancients, pls. 36 and 48, to draw the obvious conclusion that our Lampsakene Alexanders belong to Head's Period V, c. 280-190 B.C., rather than to his Period VI, c. 190-100 B.C.

Having now reached the determination of the broad limits of the period within which, on grounds of style alone the Alexandrine coinage of Lampsakos must have been issued, let us examine some of the Third Century coinages bearing similar types with a view to limiting our Lampsakene Alexanders within narrower dates. The Alexandrine types of Antiochos I Soter, 281-261 B.C., issued early in his reign (Babelon, Rois de Syrie, pl. iv, 3 and 4) are manifestly more akin to the posthumous Alexandrine issues of 323-307 B.C. than to our coinage. An Alexandrine coinage commencing in the latter part of the Fourth Century and continuing through the Third Century would be an ideal term of comparison, and such a one fortunately is available in the coinage struck at the mint of Arados. Happily we are aided here by the fact that the latter half of the series is dated coinage, and therefore such comparisons as we may be able to make, will have a greatly increased value. The Aradian Alexanders are not illustrated in any one work in a continuous series as fully as one could wish for our present

purpose, but from the plates of Rouvier's monograph, Num. des villes de la Phénicie (J. I. N., 1900), we may very quickly select those coins most closely resembling our Lampsakene issues. On pl. Z[1], Nos. 1 and 2 are figured two Alexandrine issues which, according to Rouvier's and Hill's dating, fall within the period c. 260-240 B.C. The first (*op. cit.*, pl. Z[1], 1) which Rouvier dates between 259-240 B.C., and Hill, between 261-243 B.C., is no earlier and no later in style than our tetradrachms which bear the primary monogram ⌘ (and variants), Pl. VII, 7-13; while the second Aradian piece (*op. cit.*, pl. Z[1], 2) which bears the date "year 19" of the Aradian era commencing in 259 B.C. and was consequently struck in 241-240 B.C., is nearer in style to the tetradrachm of Lampsakos lacking the primary monogram, which seems to be the latest issue among the existing Alexanders from our mint. While of course we shall not push our argument so far as to maintain that our Lampsakenes commenced in 260 and ended in 240, we are certainly justified in deducing that they fall approximately within the period 280-250 B.C.

The Third Century issue of Alexandrine staters and tetradrachms of Sinope[1] is another series with which we may compare our Lampsakene coinage of the same denominations. The style of the Sinopean coins, is, however, peculiar to the locality of the Black Sea, so that the comparison of styles is rendered more difficult. On the whole, the style of the Sinopean Alexanders would seem somewhat later than the Lampsakene. But examples of staters of both mints occurred in the Anadol hoard so that the coinages cannot be very far apart.

The tetradrachms attributed to Kyzikos in the Third Century (Head, Coins of the Ancients, pl. xxxvi, 1) are about contemporaneous in style with the Lampsakene tetradrachms. This Mysian city (a near neighbor of Lampsakos, both belonging in this period to the province of Hellespontine Phrygia) first appears as an independent community in 218 B.C., but had probably obtained full autonomy much earlier under Antiochos II (Niese, *op. cit.*, p. 135). Now, considering the numismatic evidence in full, that derived from the dated Third Century coins of Arados, and that derived from the analysis of the Anadol hoard, we are most naturally led to the conclusion that Lampsakos also was a free city during the reign of Antiochos II, 261-246 B.C. Niese considers that Antiochos II, pressed by the political situation, must have granted the Ionian coast cities their autonomy, and states that Miletos, Smyrna and Erythrai are definitely known to have won autonomy from Antiochos II. Autonomy does not mean necessarily freedom from tribute, and Lampsakos may have possessed this semi-

[1] Newell, The Alexandrine Coinage of Sinope, Amer. Journ. Num., LII (1918).

autonomy, which it seems probable Kyzikos and many other powerful cities of Asia Minor had obtained from the Seleucid king.

To this period then, we should tentatively assign these autonomous issues of the city of Lampsakos. They are but the continuation after an interval of the Fourth Century Alexandrine coinage and the Lysimachian issues. They form a very compact group not divisible into series, and hence we cannot (with the material extant) postulate a very long period of issue. The only really obscure point is the political status of the city with relation to the empire of the Seleucids, but from the scanty sources at our command, the inferences we have made seem allowable. The only other possible period, politically considered, when Lampsakos would have been able to strike a sovereign coinage is when she came under the protection of Attalos I of Pergamon, 240-197 B.C., but there is no other evidence which we can bring forward to support a thesis that Lampsakos became an autonomous city-state under Attalid protection; and, as we have seen, the numismatic evidence is all in favor of our placing the coinage before rather than after 250 B.C. The tetradrachms show a considerable laxity of style as compared with the drachms of Lysimachos from our mint, so that we are more inclined to date their issue under Antiochos II than under Antiochos I.

The autonomy which Lampsakos enjoyed was probably not very complete nor of long duration, so much we may conclude from the character of the issues. Also, as we already have stated, under Seleukos II (246-226 B.C.), we find Lampsakos obliged to appeal for protection to Attalos in 240 B.C. which would seem to indicate the precarious nature of her independent position.

SILVER TETRADRACHMS

After 190 B.C., autonomous issues

The issue of small silver of local types at Lampsakos practically ceased as was shown above about 330 B.C. During the last quarter of the Fourth Century and the early Third Century, the coinage consisted of (1) posthumous Alexandrine types bearing only occasionally the Lampsakene mint-mark (regal) and (2) of Alexandrine types bearing the personal emblem of Lysimachos (regal). Before the middle of the Third Century Lampsakos began the issue of Alexandrine coinage invariably bearing the badge of the city (autonomous).

The political fortunes of Lampsakos after the death of Alexander in 323 B.C. can only be traced by following that of the province of Phrygia on the Hellespont in which it was located. This former Persian satrapy was given to Arrhabaios after the meeting of the Diadochi at Triparadeisos in

321 B.C. Two years later the satrapy was given to Antigonos who in 315 gave it to his nephew, Ptolemy. In 309-308 this Ptolemy was poisoned by Ptolemy I, of Egypt and the satrapy given to Phoinix (governor for Ptolemy I), but soon it returned to Antigonos' side. In 302 came the attacks of the Allied Successors against Antigonos as a result of which after the decisive contest at Ipsos in 301, Lysimachos and Seleukos I were victorious, whence followed the assignment of the satrapy to Lysimachos. The city of Lampsakos had already surrendered in 302 to Lysimachos' forces. After Lysimachos' death in 281, we have to assume that Lampsakos was subject to Antiochos I, 281-261, although we know no Seleucid coinage struck at this mint during his rule. Under Antiochos II, 261-246, were probably issued the autonomous coins shown on Pl. VII. It would seem probable that Lampsakos did not maintain complete autonomy under Seleukos II, 246-226, for as we have seen in 240 B.C. she appears to have been under Seleucid rule, and after that date until 190, the city was allied with the Pergamene dynasty. When Antiochos III (222-187 B.C.) came into conflict with Attalos I (241-197 B.C.) in the year 218, Lampsakos renewed her pledge of loyalty to the Attalid monarchy, and later on was rewarded by Eumenes (197-159 B.C.) who maintained and defended her independence against the attacks of Antiochos III. After the final defeat of the Seleucid monarch in 190 B.C., and the conclusion of peace in 188 B.C., the city was recognized as definitely free and autonomous, having no dependence whatever upon the now powerful Pergamene monarchy.

At this time began the issue of the Priapos tetradrachms. This series, Pl. VIII, 1-6, begins with a tetradrachm of fairly good style and extended over a period of some ten decades. The earliest style is that of the tetradrachms, Nos. 1 and 2, as the finer treatment of the Priapos head indicates. The coarser rendering of the head, the heavier beading and later character of the inscription of No. 3 would seem to warrant placing this piece after Nos. 4-6. On the other hand, the style of the Apollo figure of the reverse is quite superior to that of the Apollo of Nos. 4-6. Still the Priapos head of No. 3 is so closely akin to that of No. 6, and the inscription of such decidedly later character, that the correct order of the issues is probably 1, 2, 4-6, 3. This arrangement is supported also by the use of the same monogram on the coin of Sokrates, No. 3, as on the issues of Promethion, Nos. 5-6. Hence the order of issue by mint-officials would be: Demetrios, son of Demetrios, Nos. 1 and 2; Ephesios, son of Theodoros, No. 4; Promethion, son of Lampon, Nos. 5 and 6; Sokrates, son of Theophanes, No. 3.

II BRONZE

A. Fourth and Third Centuries B.C.

This series begins with the Janiform head and Pegasos types, Pl. IX, 1-3, parallel in style with the silver issues of the same types shown on Pl. VI, 22-32, and may therefore be dated about 350 B.C. There follows next a series, Pl. IX, 4-8, with a head which has been called Nike, with a query, in the British Museum Catalogue Mysia. The earliest of these heads, Pl. IX, 4, 5, are akin in style to the heads of the Nike and Hekate of the gold staters, Pl. III, 8-10, and 19-20, which were placed after 350 B.C. The small heads on the coins, Pl. IX, 9-11, with laurel wreath, upturned hair and a small horn over the forehead, may represent a river-nymph or Io (Num. Chron., 1917, p. 11), a rare representation in Greek art. It may be noted that the hair is treated identically on these and the so-called Nike heads just preceding them, with the hair gathered in a top knot from which fly curly ends, as on the Hekate head of the gold staters. The Athena heads, Pl. IX, 12 and 13, the Zeus or Poseidon (?) heads, Pl. IX, 19-24, are late issues of the Third Century, as may easily be judged from their style.

B. Second Century B.C. and Later.

The coins of the latest date before the Imperial Coinage are the Apollo head, Pl. X, 1, surely of the Second Century, and the Priapos heads, Pl. X, 2-5, all with ΛΑΜΥΑΚΗΝΩΝ on the reverse. The two Priapos heads, Pl. X, 6 and 7, with the kantharos reverse and split inscription ΛΑΜ (*obv.*) ΥΑ (*rev.*) are the crudest appearing of all these heads, and are therefore placed at the end of the autonomous series. In fig. 17, is shown a coin



Fig. 17

which recently came into the writer's possession through the kindness of Miss Isabel F. Dodd of Constantinople College. It is said to have been found near Smyrna. The obverse is counter-marked with a bunch of grapes in round depression; the reverse bears the inscription ΛΑΜΥΑ, a monogram and half-Pegasos symbol (cf. Mionnet II, p. 562, No. 313).

IMPERIAL COINAGE

AUGUSTUS TO GALLIENUS

AUGUSTUS.

1 CЄBACTOY Laureate head of Augustus, to r. Rev. ΛAMΨAK Priapos standing l., r. hand raised. Plate X, 8

2 [CЄBACTOY] ΛAMΨAKH Similar. Rev. IЄPA CYNKΛHTOC Head of Senate r. (cf. Mionnet II, p. 563, No. 319). Plate X, 9

3 KAIΣAP ΣEB[A] Bare head of Augustus to r. Rev. ΛAM–ΨA Bust of Priapos r. Plate X, 10

TRAJAN.

4 B. M. C. 80. Rev. Statue of Priapos on basis to l.

MARCUS AURELIUS.

5 B. M. C. 81. Rev. Type of No. 20.

6 AVT KA–ANTΩNIN Bare head of Marcus Aurelius, bearded to r. Rev. ΛAMΨAKHNΩN Herakles, bearded and wearing chiton, standing to r., holding in r. hand a lion's skin which he is about to throw over the shoulders of Omphale who is standing half-draped, seen from the rear, with club (?) in her r. hand. Plate X, 11

FAUSTINA JR.

7 B. M. C. 82. Type of No. 10.

LUCIUS VERUS.

8 ΛOV AVP[HΛIOC] Bust of Lucius Verus laureate and draped r. Rev. ΛAMΨAK–HNΩN Bust of Lucilla draped to r. Plate X, 12

COMMODUS.

9 B. M. C. 83. Rev. Nike to l. with wreath and palm.

10 [AVΛ?] KO–MMOΔOC Bust of Commodus, slightly bearded to r. wearing cuirass and paludamentum. Rev. ΛANΨ–AKH–NΩN Half-Pegasos r. in form of a sea-horse. Plate X, 13

SEPTIMIUS SEVERUS.

11 B. M. C. 84. Rev. Type of No. 3.

12 B. M. C. 85. Rev. Type of No. 20.

JULIA DOMNA.

13 IOVΔ[OMNA]–CЄBACT Bust r. Rev. ΛAN–ΨA–KHNΩN Similar to No. 10. Plate X, 14

CARACALLA.

14 [AVT]MAVPH–ANTΩNIN Bust of Caracalla to r., laureate, wearing cuirass and paludamentum. Rev. ΛANΨA–KHNΩN Bust of Priapos draped and wearing taenia to r. Plate X, 15

15 B. M. C. 86. Rev. Kybele seated l. holding patera; before her, a lion.

16 B. M. C. 87. Rev. Homonoia standing near lighted altar, holding patera and cornucopiae.

GETA.

17 AV[....]OC CЄΠTΓЄTAC Bust of Geta r., laureate, wearing cuirass and paludamentum. Rev. ΛΛNϒ-A-KHNΩN Similar to No. 10. **Plate X, 16**

SEVERUS ALEXANDER.

18 Carlsruhe. Zeit. f. Num. VII, p. 25, No. 2, pl. i, 15. Rev. [ЄΠI CT] ΠPEIMOY ΛΛMϒAK-HNΩN. Phrixos on ram; below, Helle lying on waves.

PHILIP I.

19 B. M. C. 88. Rev. Priapos within hexastyle temple.

TREBONIANUS GALLUS.

20 AVTKOVIBTPΓΛΛΛOC Bust of Trebonianus Gallus to r., laureate, wearing cuirass and paludamentum. Rev. ΛΛNϒΛKHN-Ω-[N] ЄΠICTPCOC-CIOV Statue of Priapos on basis l., holding in r. hand, kantharos over lighted altar, and thyrsos in l. **Plate X, 17**

21 B. M. C. 89, 90. Rev. Athena holding Nike in r., standing l., resting l. hand on shield. ΛΛNϒA-KH-NΩ-N ЄΠICTPЄVT-VXIΩN, ЄΠICTPCOC-CIOV

VALERIANUS I.

22 B. M. C. 91. Rev. Type similar to No. 21, but ЄΠIΔA-Φ-NO-V.

GALLIENUS.

23 AVTOΓ-ΑΛΛIHNO-C Similar to No. 20. Rev. ΛΛNϒΛKHN-ΩN Similar to No. 20. **Plate X, 19**

24 AVKΠΛΓΛΛΛIHNO[C] Similar. Rev. [ΛΛN]-ϒΛKHNΩ[N] Abundantia (?) standing facing, holding rudder in r., cornucopia in l. **Plate X, 20**

ALLIANCE COIN OF LAMPSAKOS AND PHOKAIA

COMMODUS.

25 AVTOKMAV-PKOMMOΔOC Similar. Rev. ЄΠICTPA MO-CCXA BNЄ The city-goddess of Phokaia on l., turreted and leaning l. arm on spear, clasping r. hand of city-goddess of Lampsakos helmeted and resting l. hand on shield; between two, ΩMONOI[A] in three lines; in exergue, ΦΩKAIЄΩN ΛΛMϒA (cf. Mionnet II, p. 565, No. 330 where the proper name ΦΩKAIЄΩN is read IOVΛIЄΩN). **Plate X, 18**

ADDENDA

(cf. p. 63, note 1).

1. Of these unique pieces without the ethnic, the drachm (Gaebler, *op. cit.*, pl. ii, 1) seems certainly to be transitional in style, and the three coins (*ibid.*, pl. ii, 1-3) therefore may be regarded as sporadic issues of the Fifth Century. However, this does not affect our main contention that the coins of our Group B are to be placed at about the beginning of the Fourth Century, and that their "archaism" is not a retention such as occurs in the transitional period, but a deliberate revival of the next Century. Compare further Dr. Regling's remarks on the chronology in his review of Dr. Gaebler's paper (Zeit. f. Num., xxxiv, p. 373). This writer would assign the extremely scarce issues (Gaebler, pl. ii, 2, 3) to 464-454; the coins that seem rightly to head the series of "obols" and "diobols" (*ibid.*, pl. ii, 4, 5 = our Pl. VI, 2, 3) to 454-415. In the period 405-387, Gaebler's third subdivision, he would include not only the "diobols" (*ibid.*, pl. ii, 26-34 = our Pl. VI, 22-32) but also part of the "obols," while the great majority of the "obols," he would place between 387 and 365. The smaller denominations, he suggests, probably began earlier than the larger pieces, were continued contemporaneously with these latter, and survived them. This is an interesting point of view, and it may be noted that the coins on our Pl. VI, 19 and 30 would easily pass as contemporaneous issues, as their reverses indicate. The distinction in style, Dr. Regling thinks, may have been maintained as a method of distinguishing the two denominations.

(cf. Catalogue of Types, No. 17c).

2. The Maenad head, No. 17c, formerly Caruso, was sold again in Sotheby's Cat. "A Russian Nobleman", June, 1924, No. 176, and is now in the Newell Collection.



GOLD STATERS



GOLD STATERS



GOLD STATERS



1



2



5



6



8



3



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32



34



36

LAMPSAKENE AND RELATED TYPES



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27



SILVER COINAGE — FOURTH CENTURY B. C.



COINAGES OF LYSIMACHOS AND ALEXANDER, THIRD CENTURY B. C.



SILVER COINAGE, SECOND CENTURY, AND NON-LAMPSAKENE ISSUES



BRONZE COINAGE, FOURTH TO SECOND CENTURY B. C.



1 2 3 4 5

6 7 8 9 10

11 12 13 14 15

16 17 18 19 20

BRONZE. 190-85 B. C. AND IMPERIAL

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